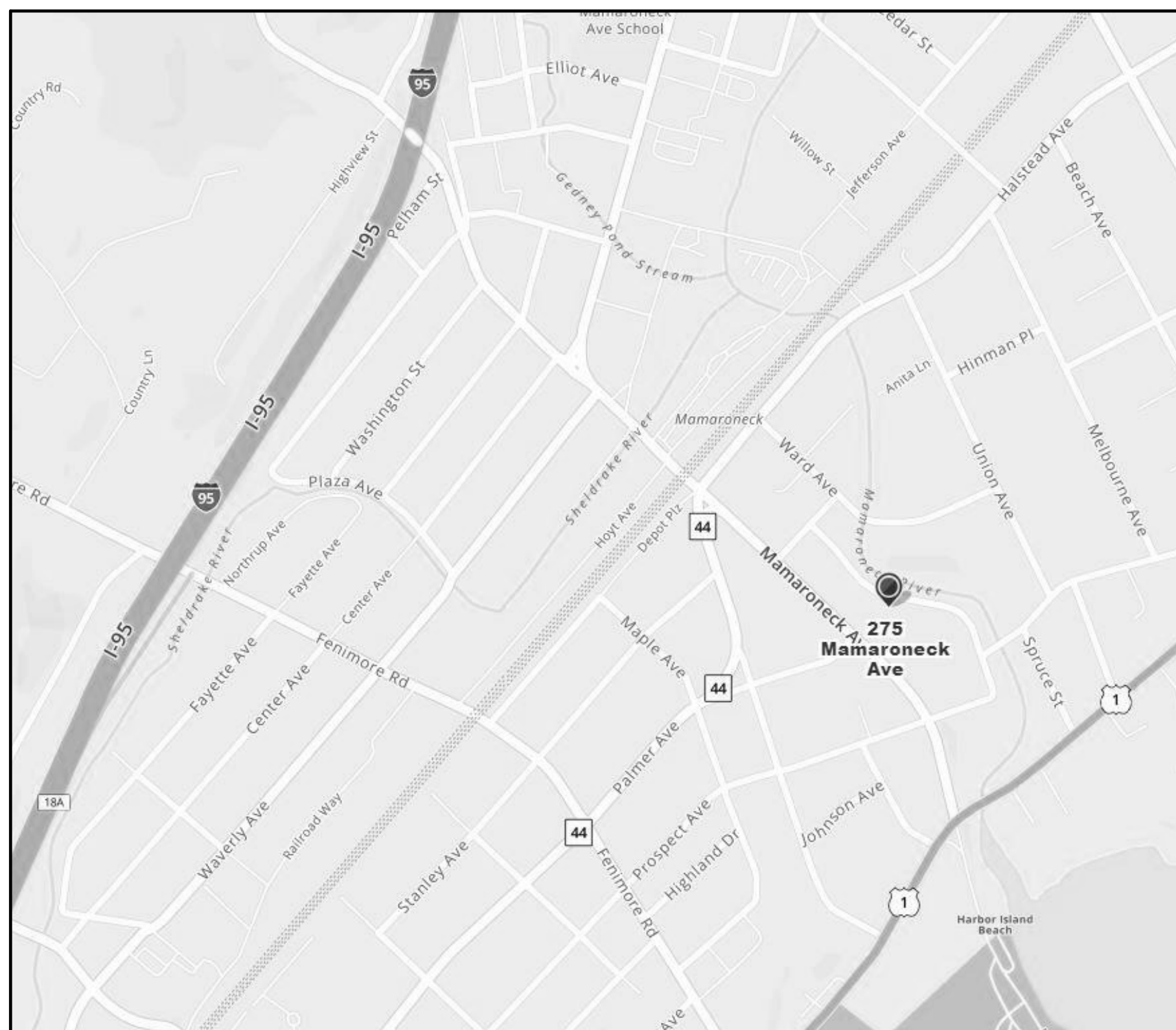
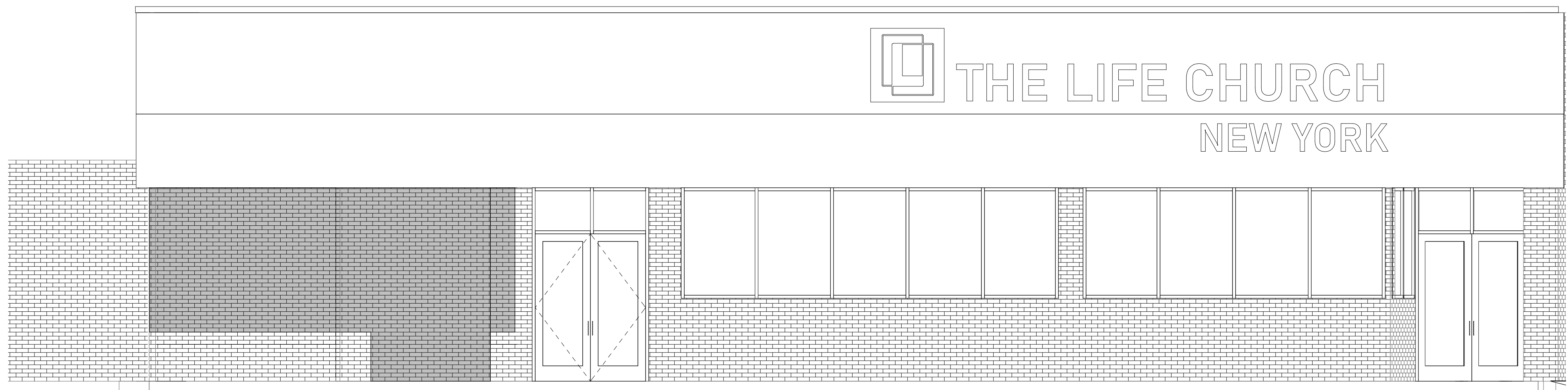


LIFE Church, NY

275 Mamaroneck Ave. Mamaroneck, NY 10543

03.03.21



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OWNER:

The Life Church
650 Houston Hill Road
Eads, TN 38028

Contact: Adam Bartlett
Ph: 901 751 0095
adam@thelifechurch.com

ARCHITECTURE & INTERIOR DESIGN:

LIVE Design Group
3117 2nd Ave. S.
Birmingham, AL 35233

Contact: Berry Hearn
Ph: 205.870.3090
berry@LIVEdesigngroup.com

STRUCTURAL ENGINEER:

The Chazen Companies
547 River Street
Troy, NY 12180

Contact: Lanson Cosh
Ph.: 917 548 9676
lcosh@chazencompanies.com

MECHANICAL ENGINEER:

M/E Engineering P.c.
433 State Street, Suite 410
Schenectady, NY 12305

Contact: Michael Rockafellow
Ph.: 518 533 2171
MDRockafellow@meengineering.com

ELECTRICAL ENGINEER:

M/E Engineering P.c.
433 State Street, Suite 410
Schenectady, NY 12305

Contact: Daniel Jackson
Ph.: 518 533 2171
DAJackson@meengineering.com

PLUMBING ENGINEER:

M/E Engineering P.c.
433 State Street, Suite 410
Schenectady, NY 12305

Contact: Michele Tracy
Ph.: 518 533 2171
Mtracy@meengineering.com

GENERAL NOTES:

- UNLESS NOTED OTHERWISE, DIMENSIONS ARE TO COLUMN CENTER LINE, CENTER LINE OF STUD PARTITIONS, FACE OF MASONRY AND CONCRETE WALLS AND FACE OF EXISTING WALLS.
- NEW WORK EXTENDING EXISTING CONDITIONS SHALL ALIGN WITH AND MATCH EXISTING WORK EXCEPT WHERE OTHERWISE DIMENSIONED OR DETAILED.
- THE CONTRACTOR WHOSE WORK REQUIRES THE CUTTING OF EXISTING CONSTRUCTION AND FINISHES SHALL BE RESPONSIBLE FOR THE REPAIR OF SUCH CONSTRUCTION AND FINISHES. THE REPAIR SHALL BE PERFORMED BY TRADES PEOPLE WHO ARE BY TRAINING AND EXPERIENCE QUALIFIED TO MAKE SUCH REPAIRS.
- ALL PENETRATIONS THROUGH FLOOR SLABS AND WALLS, SUCH AS PIPING, CONDUITS, DUCTS, PNEUMATIC TUBES, ETC., SHALL BE PACKED AND SEALED OFF WITH FIRE RATED MATERIAL (WHERE APPLICABLE) AND SEALED AGAINST WATER PENETRATION.
- SHOULD THE CONTRACTOR ENCOUNTER ANY MATERIAL IDENTIFIED AS HAZARDOUS, OR SUSPECT OF CONTAINING HAZARDOUS MATERIALS, HE SHALL IMMEDIATELY REFER TO THE GENERAL REQUIREMENTS SET FORTH IN AGREEMENT WITH OWNER AND INITIATE THE PROCEDURES SET FORTH THEREIN.
- REFER TO STRUCTURAL, MECHANICAL, ELECTRICAL, FIRE SPRINKLER AND PLUMBING DRAWINGS FOR ADDITIONAL DEMOLITION NOTES AND DETAILS.

TYPICAL DEMOLITION NOTES:

- ALL DEMOLITION WORK SHALL BE PERFORMED WITH "DUE CARE AND DILIGENCE" SO AS TO PREVENT THE ARBITRARY DESTRUCTION OR INTERRUPTION OF CONCEALED UTILITIES WHICH ARE INTENDED TO REMAIN IN USE AND THE ROUTING OF WHICH COULD NOT BE PREDETERMINED UNTIL DEMOLITION WAS STARTED. ALL SUCH DISCOVERIES OF UTILITIES DURING THE DEMOLITION PROCESS WHICH ARE IN A LOCATION DIFFERENT FROM THAT INDICATED, CHANGE DIRECTION FROM FLOOR TO FLOOR, ETC., OR ARE UNIDENTIFIED, SHALL BE REPORTED TO THE ARCHITECT BEFORE REMOVAL FOR FINAL DISPOSITION.
- REMOVE ALL CONSTRUCTION DESIGNATED TO BE REMOVED AND CLEAR TO RECEIVE NEW WORK AS HEREIN INDICATED.
- WHEREVER EXISTING EQUIPMENT, PIPING, DUCTS, ETC., ARE REQUIRED TO BE REMOVED, SUCH REMOVAL SHALL INCLUDE ALL ANCHORS, HANGARS, FOUNDATIONS, ETC. AFTER REMOVAL, AFFECTED CONSTRUCTION AND SURFACES SUCH AS FLOORS, WALLS, BASES, AND CEILINGS SHALL BE FINISHED TO MATCH ADJACENT SURFACES UNLESS OTHERWISE NOTED.
- ALL FURNISHINGS AND EQUIPMENT, SUCH AS SHELVING, CABINETS, PLUMBING FIXTURES, ELECTRICAL FIXTURES AND EQUIPMENT, AUDIO-VISUAL EQUIPMENT, PERFORMANCE EQUIPMENT, MUSICAL INSTRUMENTS, STAGE/PLATFORM EQUIPMENT, MECHANICAL EQUIPMENT, AIR CONDITIONER UNITS, ETC., REMOVED SHALL BE DISPOSED BY THE CONTRACTOR.
- ALL DOORS, FRAMES, AND HARDWARE THAT ARE REMOVED AND NOT RELOCATED SHALL BR DISPOSED BY THE CONTRACTOR.

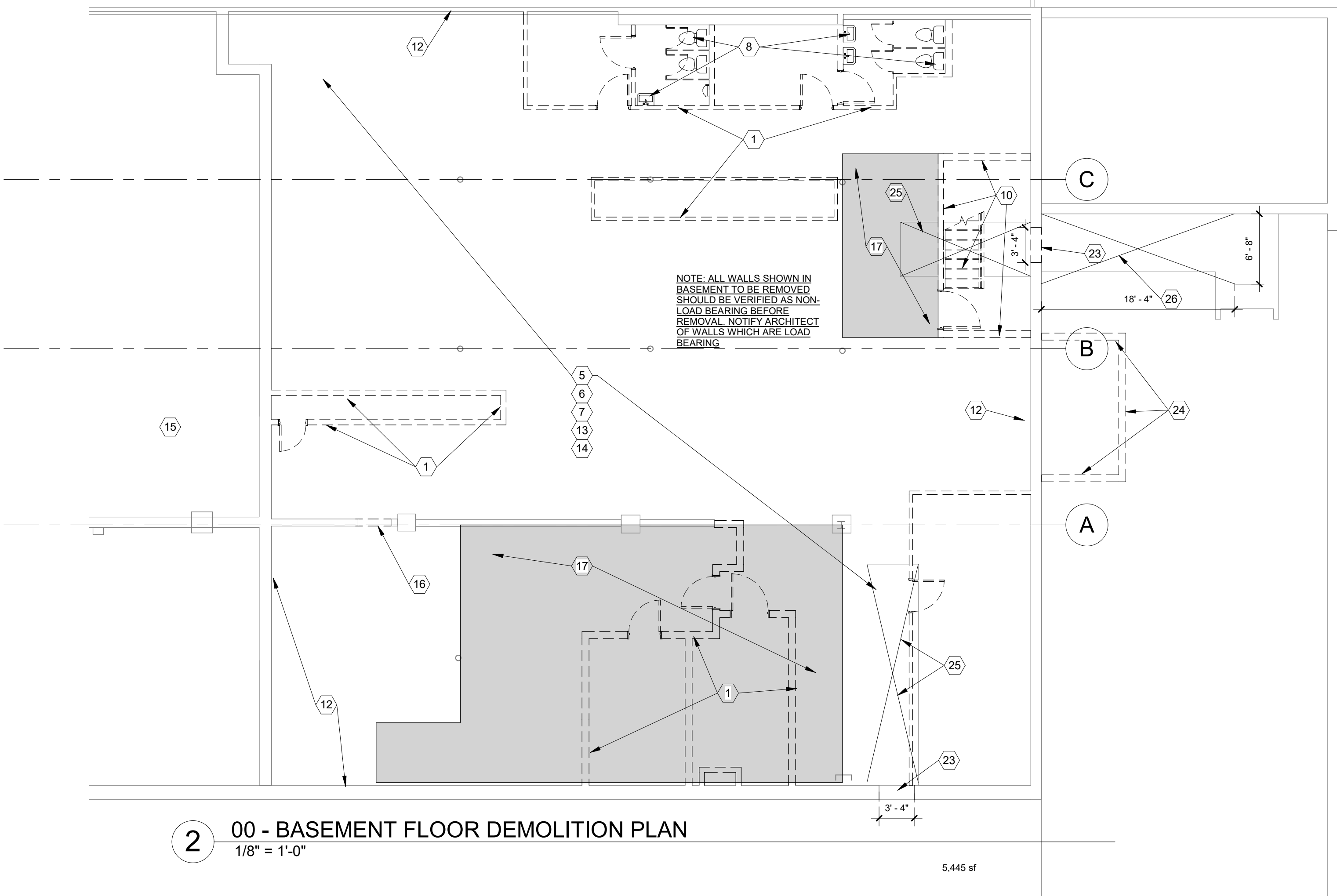
GENERAL FLOOR PREPARATION NOTES:

- CONTRACTOR SHALL VERIFY THAT ALL CONCRETE SUB-FLOOR SURFACES ARE READY FOR NEW FLOORING INSTALLATION BY TESTING FOR MOISTURE EMISSION RATE PER ASTM F1869 AND ALKALINITY IN ACCORDANCE WITH ASTM F710. SUBMIT TEST RESULTS TO OWNER AND ARCHITECT, ALONG WITH RECOMMENDATIONS FROM FLOORING MANUFACTURER(S). OBTAIN INSTRUCTIONS IF TEST RESULTS ARE NOT WITHIN LIMITS RECOMMENDED BY FLOORING MANUFACTURER AND ADHESIVE MATERIALS MANUFACTURER.
- CONTRACTOR SHALL INCLUDE THE FOLLOWING IF SLAB DOES NOT COMPLY WITH MOISTURE EMISSION RATE OR ALKALINITY REQUIREMENTS:
A) CORRECTIVE STEPS AS DIRECTED BY THE MANUFACTURER INCLUDING BUT NOT LIMITED TO APPLYING SEALER RECOMMENDED BY MANUFACTURER
- CONTRACTOR SHALL INCLUDE TESTING, AS NOTED IN ITEM #1 ABOVE, IN BASE BID
- FOR BASE BID, CONTRACTOR SHALL INCLUDE QUANTITY ALLOWANCES FOR ENTIRE SPACE OF RECOMMENDED MANUFACTURER'S SEALER. SEE FINISH SCHEDULE FOR MORE INFORMATION. BASE BID QUANTITY ALLOWANCES SHALL INCLUDE FULL INSTALLATION OF THE SEALER INCLUDING BUT NOT LIMITED TO FLOOR PREP, PURCHASE, DELIVERY, LABOR, TAXES, ETC. ANY UNUSED QUANTITIES FOR AREAS THAT DO NOT REQUIRE SEALER SHALL BE CREDITED BACK TO THE OWNER VIA CHANGE ORDER. THIS CREDIT SHALL REFLECT FULL INSTALLATION OF THE SEALER AS NOTED ABOVE.

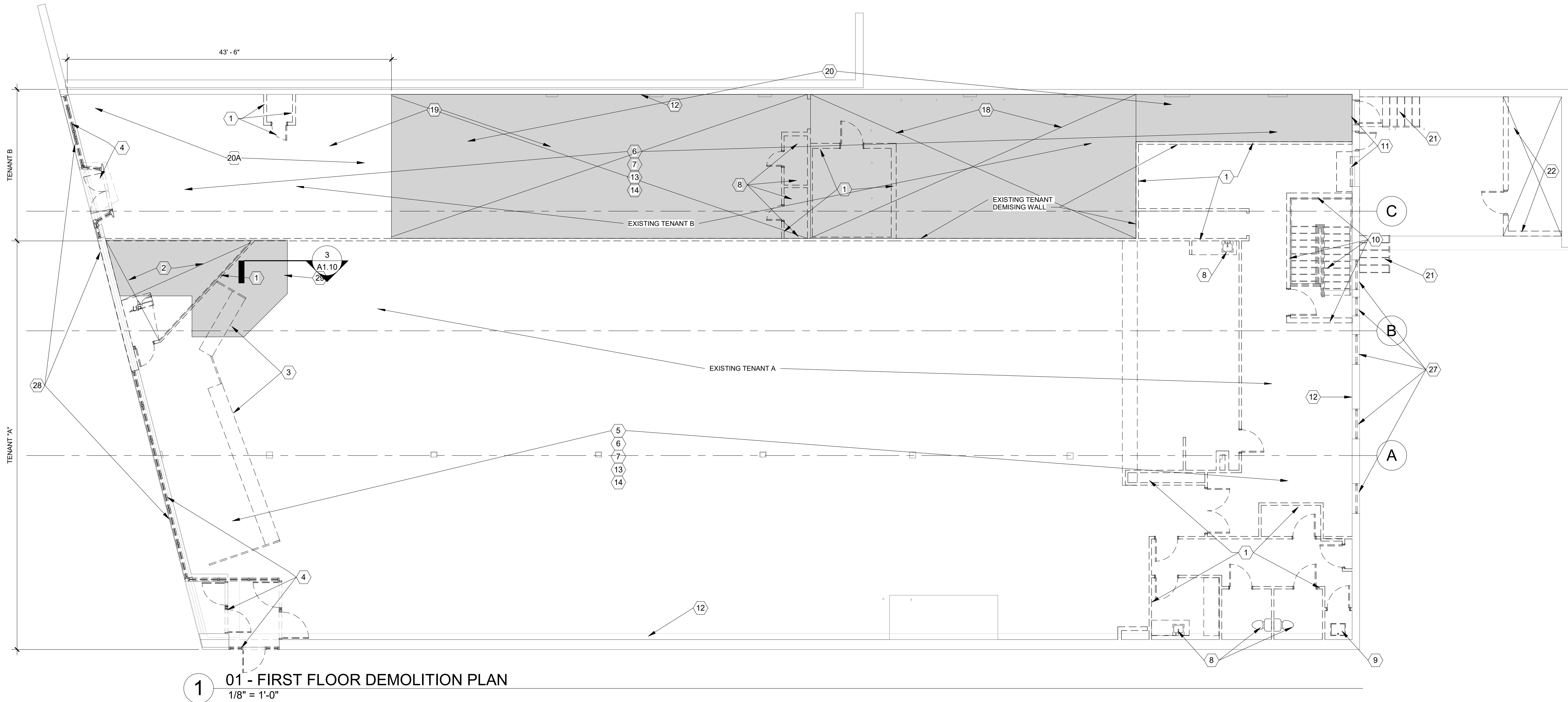
GENERAL ROOFING NOTES:

- THE EXISTING ROOF EITHER IS OR MAY BE CURRENTLY UNDER WARRANTY. ANY ROOF MODIFICATIONS MUST BE DONE BY THE BUILDING OWNER'S PREFERRED ROOFING CONTRACTOR AND IN ACCORDANCE WITH WARRANTY REQUIREMENTS. ALL ROOF DEMOLITION WORK INCLUDING PATCHING OR REMOVAL OF EQUIPMENT SHALL BE DONE DURING THE RECONSTRUCTION PHASE OF THIS PROJECT.

DEMOLITION NOTE SCHEDULE	
DEMO #	DEMOLITION NOTE DESCRIPTION
1	REMOVE EXISTING PARTITION(S) IN ITS ENTIRETY AS INDICATED BY DASHED LINES.
2	REMOVE EXISTING RAISED FLOOR IN ITS ENTIRETY IN "X"ED AREA
3	REMOVE EXISTING CASEWORK IN ITS ENTIRETY AS INDICATED BY DASHED LINES
4	REMOVE ALL EXISTING ALUM. STOREFRONT AND ENTRANCES IN THEIR ENTIRETY AS INDICATED BY DASHED LINES
5	REMOVE ALL EXISTING FINISH FLOORING IN ITS ENTIRETY IN ALL SPACES
6	REMOVE ALL EXISTING FINISH CEILINGS IN ITS ENTIRETY IN ALL SPACES
7	REMOVE ALL EXISTING ELECTRICAL LIGHTING, POWER AND DATA FIXTURES FROM ALL SPACES INCLUDING CONDUIT AND WIRING BACK TO PANELS. MODIFY EXISTING LIGHTING SYSTEM TO PROVIDE TEMPORARY LIGHTING IN ALL SPACES
8	REMOVE ALL EXISTING PLUMBING FIXTURES, WATER AND SANITARY SEWERS LINES FROM ALL SPACES. MODIFY EXISTING PLUMBING SYSTEM AS REQUIRED TO PROVIDE TEMPORARY JANITOR SINK AS LISTED IN ITEM 9
9	EXISTING JANITOR SINK TO REMAIN UNTIL RECONSTRUCTION PHASE OF PROJECT. MODIFY WATER AND DRAINAGE LINES AS REQUIRED FOR TEMPORARY WATER SERVICE DURING COURSE OF CONSTRUCTION.
10	REMOVE EXISTING STAIRS, LANDINGS, STAIR WELL WALLS AND INTERIOR ROOF OF STAIR
11	REMOVE EXISTING EXIT DOOR TO LOADING DOCK. REPLACE WITH NEW DOOR AND FRAME AS PER REMODEL PLANS. REMOVE EXISTING LOADING DOCK DOOR AND LIFT. REPLACE WITH NEW METAL STUDS, 1/2" SHEATHING BOARD AND BRICK VENEER AT EXTERIOR. SEE FLOOR PLANS FOR INTERIOR FINISH NOTES
12	REMOVE ALL EXISTING FINISH WALL MATERIALS FROM EXTERIOR WALLS
13	REMOVE ALL EXISTING FIRE SPRINKLER PIPING AND EQUIPMENT
14	REMOVE ALL EXISTING HVAC EQUIPMENT, DUCTWORK, AND CONTROL WIRING. REPAIR ALL ROOF OPENINGS WHERE ROOF TOP EQUIPMENT REMOVED. COORDINATE WITH PREVIOUS ROOFING CONTRACTOR AS REQUIRED
15	IN CRAWL SPACE, REMOVE ALL ABANDONED MECHANICAL, ELECTRICAL & PLUMBING, DUCTS, CONDUIT, PIPING ETC. CREATED BY REMOVING MEP WORK ABOVE
16	REMOVE EXISTING BRICK MASONRY WALL AS REQUIRED FOR PLACEMENT OF NEW DOOR AND FRAME. SEE DTL. ??
17	REMOVE EXISTING FLOOR STRUCTURE AND FLOORING ABOVE IN SHADED AREAS. SEE STRUCTURAL DRAWINGS FOR REPLACEMENT FLOORING CONSTRUCTION NOTES AND DETAILS
18	REMOVE EXISTING PLYWOOD SUB-FLOOR IN "X"ED AREA. REPLACE WITH NEW 3/4" TONGUE & GROOVE PLYWOOD GLUED AND SCREWED TO EXISTING JOISTS
19	REMOVE EXISTING TILE FLOORING AND MORTAR SETTING BED IN "X"ED AREA
20	ALL OF TENANT B AREA IS APPROXIMATELY 4" BELOW HEIGHT OF TENANT A FLOOR. PROVIDE (IN GRAY SHADED AREA) NEW 2X4 SLEEPERS WITH 4" VERTICAL W/3/4" TONGUE AND GROOVE PLYWOOD GLUED AND SCREWED TO SLEEPERS OVER ENTIRE TENANT B AREA
20A	NON SHADED PORTION OF TENANT B DOES NOT RECEIVE NEW VERTICAL 2" X 4 SLEEPERS AND 3/4" PLYWOOD SUB-FLOORING. NEW FINISH FLOORING SHALL BE PLACED ON EXISTING PLYWOOD SUB-FLOORING
21	EXISTING CONC. STAIRS AND RAILING ON CMU SUPPORT WALLS TO BE REMOVED
22	REMOVE EXISTING DOCK OFFICE CMU WALLS AND ROOF ABOVE IN "X"ED AREA. REMOVE ANY REBAR DOWNELED INTO SLAB AND GRIND SLAB SMOOTH AFTER REMOVAL
23	REMOVE EXISTING BRICK WALL FOR PLACEMENT OF NEW DOOR. PROVIDE NEW STEEL CHANNEL HEADER ASSEMBLY AS PER DETAIL. ?
24	REMOVE EXISTING HVAC UNIT. CONCRETE SUPPORT SLAB, CMU WALLS AND STEEL PIPE BUMPERS
25	REMOVE EXISTING CONCRETE SLAB AS REQUIRED FOR PLACEMENT OF NEW POURED IN PLACE CONC. RAMP IN "X"ED AREA
26	REMOVE EXISTING FLOOR STRUCTURE AND FLOORING ABOVE IN SHADED AREAS. SEE STRUCTURAL DRAWINGS FOR REPLACEMENT FLOORING CONSTRUCTION NOTES AND DETAILS
27	REMOVE EXISTING EXTERIOR PAVING AND EXCAVATE AS REQUIRED FOR PLACEMENT OF NEW CONCRETE RAMP TO GRADE AND CONC. RETAINING WALL IN "X"ED AREA
28	REMOVE EXISTING WINDOWS. ENCLOSE OPENINGS WITH NEW 3-5" METAL STUD FRAMING, 12" EXTERIOR SHEATHING & 4" BRICK VENEER AT EXTERIOR. INTERIOR SHALL BE AS SHOWN ON FINISH PLANS
29	REMOVE EXISTING STUCCO FINISH AND METAL CLADDING ALONG THIS ELEVATION IN ITS ENTIRETY
29	REMOVE EXISTING PLUMB FLOOR AND 2" X 4 WOOD SLEEPERS IN SHADED AREA TO ALLOW TRANSITION DOWN TO VESTIBULE/RESTROOM FLOOR HEIGHT AND SIDEWALK AT EXTERIOR OF BUILDING



2 00 - BASEMENT FLOOR DEMOLITION PLAN
1/8" = 1'-0"

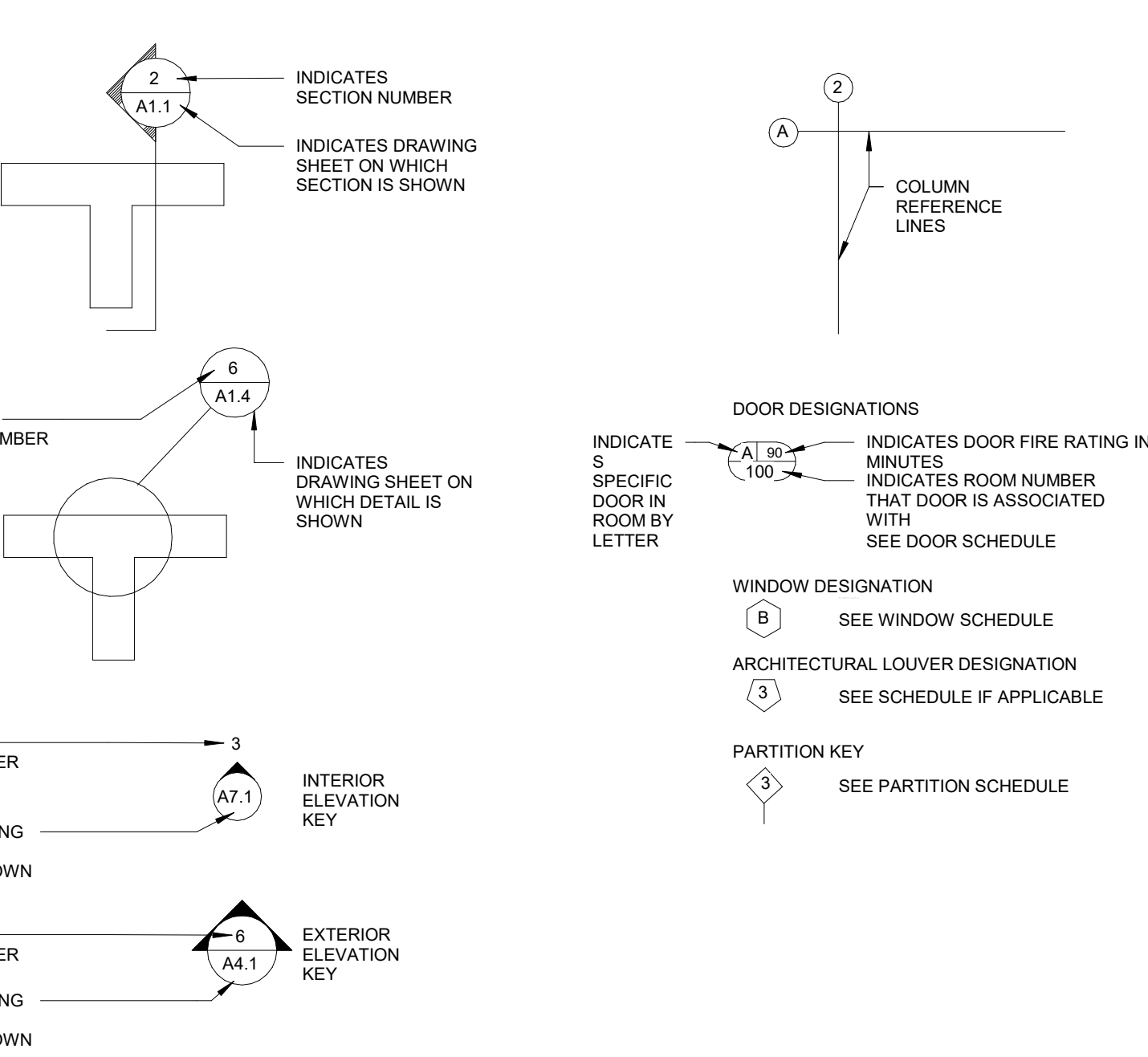


1 01 - FIRST FLOOR DEMOLITION PLAN
1/8" = 1'-0"

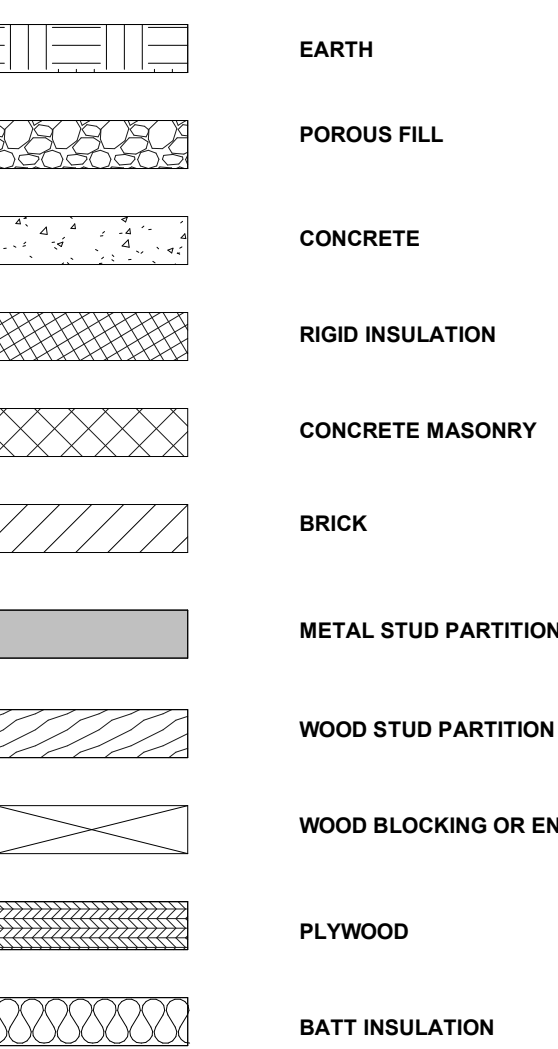
ABBREVIATION

A.F.F.	ABOVE FINISHED FLOOR	LAM.	LAMINATE (D)
ADD.	ADDENDUM	LAV.	LAVATORY
ADJ.	ADJUSTABLE (MENT)	L.H.	LEFT HAND
A/C	AIR CONDITIONING	L.H.R.	LEFT HAND REVERSE
ALT.	ALTERNATE	L.T.	LIGHT
ALUM.	ALUMINUM	L.T. WT.	LIGHT WEIGHT
ANCH.	ANCHOR BOLT	L.F.	LINEAR FOOT
ANOD.	ANODIZED	L.L.	LIVE LOAD
APPROX.	APPROXIMATE (LY)	L.V.R.	LOUVER
BSMT.	BASEMENT	LUM.	LUMINOUS
B.M.	BENCHMARK	M.H.	MANHOLE
BEL.	BELOW	MFR.	MANUFACTURE (ER)
BEAM.	BEAM	M.D.	MEDIUM DENSITY FIBERBOARD
BRG.	BEARING	MAS.	MASONRY
B.R.	BENCH MARK	M.O.	MASONRY OPENING
BD.	BOARD	M.R.	MOISTURE RESISTANT
B.O.H.	BACK OF HOUSE	MATL.	MATERIAL (S)
BLKG.	BLOCKING	MAX.	MAXIMUM
BRK.	BROCK	MECH.	MECHANIC (AL)
BLDG.	BUILDING	METER	METER
B.R.	BUILT UP ROOFING	MILLW.	MILLWATER (S)
CAB.	CABINET	MIN.	MINIMUM (S)
CPT.	CARPET	MISC.	MISCELLANEOUS
CSMT.	CASSETT	MOD.	MODULAR
CLG.	CEILING	MO.	MOUNT (ED), (ING)
CEM.	CERAMIC	MOV.	MOVABLE
CER.	CERAMIC TILE	MULL.	MULLION
C.T.	CERAMIC TILE	NAT.	NATURAL
C.M.T.	CERAMIC MOSAIC TILE	N.R.	NOISE REDUCTION
CLR.	CLEAR (ANCE)	N.R.C.	NOISE REDUCTION COEFFICIENT
C.O.	CLEAN OUT	NOM.	NOMINAL
CL.	CENTER LINE	N.	NORTH
CLST.	CLOSET	N.I.C.	NOT IN CONTRACT
COL.	COLUMN	N.T.S.	NOT TO SCALE
CONC.	CONCRETE	O.C.	ON CENTER
C.M.U.	CONCRETE MASONRY UNIT	OFC.	OFFICE
CONSTR.	CONSTRUCTION	OPNG.	OPENING
CONT.	CONTINUOUS	OPP.	OPPOSITE
CONTR.	CONTROL JOINT	O.D.	OUTSIDE DIAMETER
CORR.	CORRUGATED	PAR.	PARALLEL
CTR.	CENTER	PANEL.	PANEL
CF	CUBIC FOOT	PARL.	PARALLEL
CY.	CUBIC YARD	PK.	PARKING
D.E.F.S.	DIRECT APPLIED EXTERIOR FINISHING SYSTEM	PAV.	PAVING
DL.	DEAD LOAD	PVMT.	PAVEMENT
DTL.	DETAIL	PERF.	PERFORATE (D)
DIAM.	DIAMETER	PERIM.	PERIMETER
DM.	DIMENSION	PLAM.	PLASTIC LAMINATE
DR.	DOOR	P.C.F.	POUNDS PER CUBIC FOOT
DR.	DOWN	P.L.F.	POUNDS PER LINEAR FOOT
DS.	DOWNSPOUT	P.S.F.	POUNDS PER SQUARE FOOT
DRAW.	DRAWING	P.S.F.	POUNDS PER SQUARE INCH
DWG.	DRAWING	PREFAB.	PREFABRICATE (D)
D.F.	DRINKING FOUNTAIN	PREFIN.	PREFINISHED
E.	EAST	PT.	PRESSURE TREATED
E.I.F.S.	EXTERIOR INSULATED FINISHING SYSTEM	PTD.	PAINTED
ELEC.	ELECTRIC (AL)	QTY.	QUANTITY
ELEV.	ELEVATION	QTR.	QUARTER (LINE)
ELEV.	ELEVATION	RAD.	RADIUS
EMER.	EMERGENCY	RECEP.	RECEIPT
ENCL.	ENCLOSE (URE)	REFRIG.	REFRIGERATOR
EQ.	EQUAL	REG.	REGISTER
EXH.	EXHAUST	REIN.	REINFORCE (D), (ING)
EXIST.	EXISTING	R.C.P.	REFLECTED CEILING PLAN
E.J.	EXPANSION JOINT	REQD.	REQUIRED
EWC.	ELECTRIC WATER COOLER	R.A.	RETURN AIR
EXP.	EXPOSED	REV.	REVISION (S), (ED)
EXT.	EXTERIOR	R.H.	RIGHT HAND
F.W.C.	FABRIC WALL COVERING	R.H.	RIGHT HAND REVERSE
F.O.S.	FACE OF STUDS	R.O.W.	RIGHT OF WAY
FAS.	FASTEN (ER)	R.D.	ROOF DRAIN
FEC.	FIRE EXTINGUISHER CABINET	R.F.	ROOFING
FHC.	FIRE HOSE CABINET	RM.	ROOM
FGL.	FIBERGLASS	R.O.	ROUGH OPENING
FIN.	FINISH (ED)	SCHED.	SCHEDULE
FL.	FLOOR (ING)	SECT.	SECTION
F.D.	FLOOR DRAIN	SF.	SQUARE FEET
FLUOR.	FLUORESCENT	SHTH.	SHEATHING
F.O.H.	FRONT OF HOUSE	SM.	SIMILAR
FT.	FOOT (FEET)	S.C.	SOLID CORE
FTG.	FOOTING	SCFW.	SOLID CORE FLUSH WOOD
FND.	FOUNDATION	S.	SOUTH
FUT.	FUTURE	S.L.	SOUND AND LIGHT LOCK
F.R.	FIRE RATED	SL.	STAGE LEFT
GA.	GAGE, GAUGE	SPEC.	SPECIFICATION (S)
GALV.	GALVANIZED	SQ.	SQUARE
G.I.	GALVANIZED IRON	SR.	STAGE RIGHT
G.C.	GENERAL CONTRACT (OR)	S.S.	STAINLESS STEEL
GL.	GLASS GLAZING	STD.	STANDARD
GR.	GRADE	STL.	STEEL
GYP.	GYPSUM WALLBOARD	STOR.	STORAGE
GWB.	GYPSUM WALLBOARD	S.D.	STORM DRAIN
HC.	HANDICAP	STRUCT.	STRUCTURAL
H.R.	HOUR	SURF.	SURFACE
HDW.	HARDWARE	SUSP.	SUSPENDED
HWD.	HARDWOOD	SYM.	SYMMETRY (OR SYMBOL)
HDR.	HEADER	TEL.	TELEPHONE
HTG.	HEATING	TV.	TELEVISION
HVAC.	HEATING/VENTILATION/AIR CONDITION	TER.	TERRAZZO
H.O.	HOLD OPEN	THK.	THICK (NESS)
HT.	HEAVY DUTY	THRESH.	THRESHOLD
H.D.	HEIGHT	T&G.	TONGUE AND GROOVE
H.C.	HOLLOW CORE	T.O.	THEATRICAL LIGHTING
H.M.	HOLLOW METAL	T.O.P.	TOP OF
HOR.	HORIZONTAL	T.O.C.	TOP OF CURB
H.B.	HOSE BIB	T.O.SL.	TOP OF SLAB
H.W.H.	HOT WATER HEATER	T.O.S.	TOP OF STEEL
IN.	INCH	T.O.W.	TOP OF WALL
INCL.	INCLUDE (D), (ING)	TYP.	TYPICAL
ID.	INSIDE DIAMETER	U.L.	UNDERWRITERS LAB. INC.
INSUL.	INSULATE (D), (ION)	UN.O.	UNLESS NOTED OTHERWISE
INT.	INTERIOR	UR.	URINAL
INV.	INVERT	US.	UPSTAGE
JAN.	JANITORS CLOSET	VAR.	VARIES
JT.	JOINT	VERT.	VERTICAL
JST.	JOIST	VEST.	VESTIBULE
KIT.	KITCHEN	V.C.T.	VINYL COMPOSITION TILE
KD.	KNOCKDOWN	WSC.	WAINSCOT
K.O.	KNOCKOUT	W.H.	WALL HUNG
L.B.	LABEL	W.C.	WATER CLOSET
LAB.	LABORATORY	W.R.	WATER REPELLANT (WATER RESISTANT)
LAD.	LADDER	WT.	WEIGHT
		W.W.F.	WELDED WIRE FABRIC
		W.	WIDTH
		W.	WIDE
		W.	WIDE FLANGE STEEL SHAPE
		W.	WITH
		WIN.	WINDOW
		WD.	WOOD
		YD.	YARD

LEGENDS

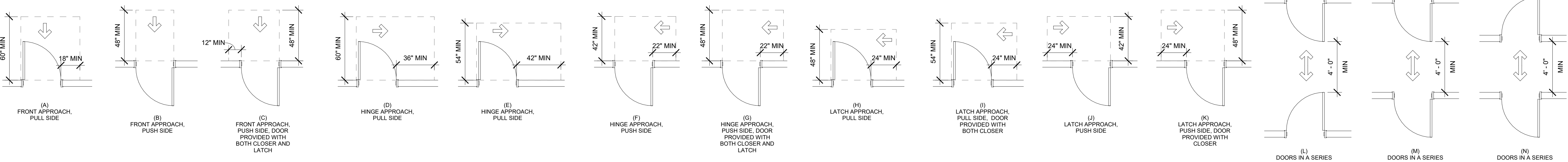


MATERIALS LEGEND



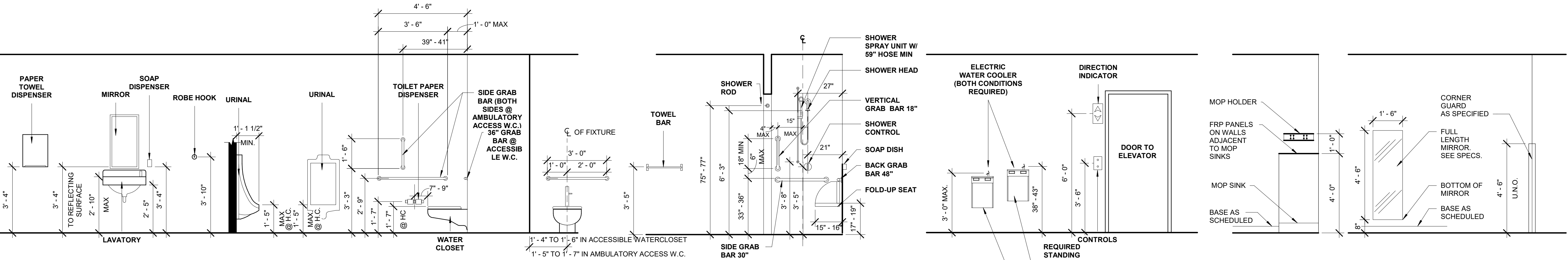
GENERAL NOTES

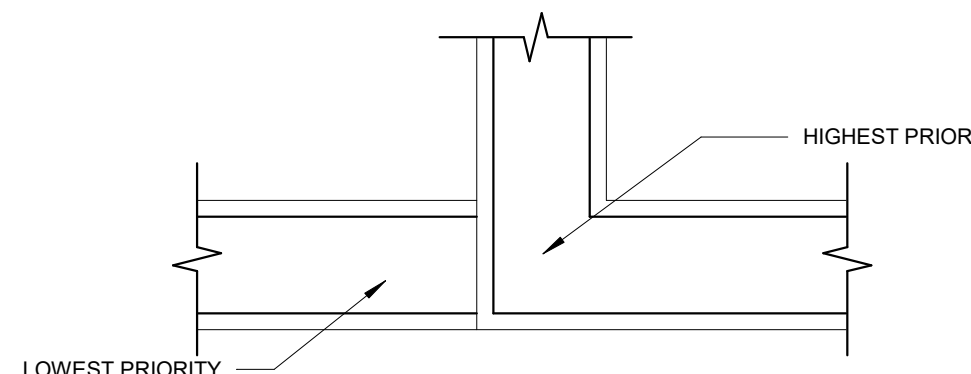
1. GENERAL NOTES:
 - 1A. CONDITIONS AND DIMENSIONS - DO NOT SCALE DRAWINGS. FIELD VERIFY ALL DIMENSIONS. CHECK ALL DIMENSIONS AND OTHER IRREGULARITIES PRIOR TO BEGINNING CONSTRUCTION. FABRICATING OR ORDERING ANY MATERIALS. REPORT ANY IRREGULARITIES OR DISCREPANCIES TO ARCHITECT IMMEDIATELY AND ADJUST WORK AS DIRECTED BY ARCHITECT. ANY CHANGES TO THE SCOPE OF THE WORK OR PROJECT SCHEDULE RESULTING FROM DISCREPANCIES BETWEEN THE DRAWINGS AND EXISTING CONDITIONS MUST BE AGREED TO BY THE OWNER, CONTRACTOR, AND ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
 - 1B. SUBCONTRACTORS ARE REQUIRED TO REVIEW THE ENTIRE SET OF CONTRACT DOCUMENTS TO NOTE AREAS OF WORK OF THEIR TRADE ON SHEETS TRADITIONALLY KNOWN AS WORK OF OTHER TRADES (I.E. THE REQUIREMENTS OF PROVIDING POWER TO MECHANICAL OR OTHER EQUIPMENT SHOWN ELSEWHERE IN THE CONTRACT DOCUMENTS & NOT ON THE ELECTRICAL DRAWINGS). THE ARCHITECT IS TO BE NOTIFIED IN WRITING OF ANY DISCREPANCY AND WILL COORDINATE DESIGN WORK OF THESE ITEMS. THE GENERAL CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR IDENTIFYING AND INCLUDING ALL ITEMS OF WORK INCLUDED IN THE CONTRACT DOCUMENTS, REGARDLESS OF WHERE ANY ITEM SHALL APPEAR IN SAID CONTRACT DOCUMENTS.
 - 1C. CEILING UTILITY COORDINATION - INSTALL ALL ELECTRICAL AND OTHER CONDUIT TIGHT TO STRUCTURE. CONNECT CEILING GRID AND LIGHTING FIXTURE TIE WIRES TO STRUCTURAL ELEMENTS ABOVE. DO NOT ATTACH TO OTHER SYSTEMS SUCH AS CONDUIT, DUCTS, PIPES, ETC. PROVIDE A MINIMUM OF 1'-0" CLEAR ZONE ADJACENT TO ANY FIRE OR SMOKE PARTITION.
 - 1D. CONTRACTOR SHALL VERIFY AND COORDINATE SPECIFIC REQUIREMENTS FOR OWNER PROVIDED AND/OR INSTALLED EQUIPMENT.
 - 1E. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK INCLUDED IN THE CONTRACT DOCUMENTS. ALL CORRESPONDENCE FROM SUBCONTRACTORS SHALL BE ROUTED THROUGH THE CONTRACTOR.
 - 1F. ADJACENT WORK, INCLUDED UNDER OTHER CONSTRUCTION CONTRACTS, WHICH IS DAMAGED DURING EXECUTION OF THIS CONTRACT WORK, SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR PRIOR TO FINAL ACCEPTANCE OF THE WORK.
 - 1G. PIPING, DUCTWORK, ETC., LOCATED IN THE FINISHED AREAS OF THE BUILDING SHALL BE CONCEALED IN CHASES/FURRED SPACES WITH THE EXCEPTION OF PIPING IN EQUIPMENT ROOMS, AND STANDPIPES, REQUIRED BY CODE TO BE EXPOSED.
 - 1H. ALL OPENINGS FOR PIPE, DUCTS, AND CONDUIT THROUGH ANY WALLS AND SLABS COMMON TO NOISE CRITICAL SPACES SHALL BE SLEEVED OR FRAMED TO ACCOMMODATE A FLEXIBLE ONE INCH JOINT FILLER SURROUNDING THE PENETRATING ELEMENT.
 - 1J. ALL FIRE RATED CONSTRUCTION SHALL CONFORM WITH UL TESTED STANDARDS AND/OR LOCAL REQUIREMENTS.
 - 1K. COORDINATE LOCATION OF FIXTURES WITH MECHANICAL AND ELECTRICAL DRAWINGS. NOTIFY ARCHITECT OF LAYOUT CONFLICTS OR DISCREPANCIES.
 - 1L. INSTALL FURRING AROUND COLUMNS AND CHASES AS CLOSE AS POSSIBLE TO PIPES AND STRUCTURE.
 - 1M. THE PROJECT DOCUMENTS PROVIDE THAT NO ASBESTOS, ASBESTOS PRODUCTS, PCBs OR OTHER SUBSTANCE DEEMED TOXIC OR HAZARDOUS UNDER APPLICABLE FEDERAL, OR STATE LAWS, RULES, REGULATIONS OR ORDINANCES, ARE TO BE CONTAINED OR INCORPORATED IN THE PROJECT WORK.
2. EXISTING CONDITIONS NOTES:
 - 2A. CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES WITHIN A REASONABLE TIME PERIOD TO ALLOW FOR REVISIONS OR CHANGES IN DESIGN PRIOR TO SCHEDULED WORK.
 - 2B. CONTRACTOR TO SCHEDULE BUILDING AND HARDSCAPE STAKING INSPECTION AND NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE BEGINNING ANY WORK.
 - 2C. ANY DAMAGE BY G.C. OR SUBCONTRACTOR TO EXISTING ASPHALT PAVEMENT AND/OR EXISTING LANDSCAPING SHALL BE REPAIRED AT NO COST TO THE OWNER.
3. CONCRETE NOTES:
 - 3A. DESIGN LOADS ARE SPECIFIED BY THE STRUCTURAL DRAWINGS.
 - 3B. INTERIOR FLOOR SLABS ARE TO BE FINISHED TO RECEIVE FLOOR FINISHES AS NOTED IN THE FINISH SCHEDULE. WHERE FLOOR FINISH IS NOTED AS SEALED CONCRETE, THE CONTRACTOR SHALL PROTECT THE CONCRETE FROM DAMAGE INCLUDING BUT NOT LIMITED TO STAINING, STAINING, AND EXCESSIVE WEAR.
 - 3C. ALL EXTERIOR SIDEWALK EXPANSION JOINTS TO RECEIVE GUN GRADE POLYURETHANE TRAFFIC SEALANT.
 - 3E. PROTECT CONCRETE SLABS TO BE EXPOSED, SEALED AND LEFT OTHERWISE UNFINISHED DURING CONSTRUCTION FROM DAMAGE INCLUDING BUT NOT LIMITED TO STAINING, MARKING, AND EXCESSIVE WEAR.
 - 3F. PRESSURIZED LINES, DRAINS, ETC., WHICH PENETRATE EXISTING OR IN-PLACE MASONRY WALLS SHALL BE INSTALLED BY CORE DRILLING. NO CHIPPING OF MASONRY WALLS WILL BE ALLOWED. REFER TO THE ELECTRICAL AND MECHANICAL DRAWINGS.
4. WOOD NOTES:
 - 4A. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND PROVIDING REQUIRED BLOCKING FOR ALL WALL MOUNTED EQUIPMENT AND FIXTURES.
 - 4B. ALL WOOD BLOCKING IN EXTERIOR WALLS, EXTERIOR OF THE BUILDING ENVELOPE OR IN CONTACT WITH THE GROUND FLOOR SLAB SHALL BE PRESSURE TREATED UNLESS OTHERWISE NOTED.
 - 4C. ALL WOOD, PLYWOOD, BLOCKING, AND FRAMING LOCATED IN FIRE RATED BUILDING ELEMENTS SHALL BE FIRE RETARDANT TREATED.
5. THERMAL & MOISTURE PROTECTION NOTES:
 - 5A. ALL SHEET METAL FLASHING DETAILS ARE TO BE IN ACCORDANCE WITH SMACNA "ARCHITECTURAL SHEET METAL MANUAL," IN LATEST PUBLISHED EDITION. SEALANT USED IN ASSOCIATION SMACNA DETAILS SHALL BE ULTRA-LAW MODULUS SILICONE SEALANT.
 - 5B. ALL GUTTERS, DOWNSPOUTS, GRAVEL STOPS, FASCIA, FLASHING, LOUVERS, SCREENS, METAL STRUCTURES AND ANY ROOF PENETRATIONS ARE TO BE INSTALLED AND FABRICATED AS PER SMACNA STANDARDS OR IN ACCORDANCE WITH ROOFING MANUFACTURER'S RECOMMENDATIONS AS REQUIRED TO OBTAIN MANUFACTURER'S WARRANTIES REQUIRED BY THE SPECIFICATIONS.
 - 5C. CONTRACTOR SHALL PROVIDE FLASHING AS SHOWN FOR ALL WINDOW, STOREFRONT, WINDOW WALLS AND DOOR JAMES, BELLS & HEADS. SUBMIT SHOP DRAWINGS PRIOR TO START OF CONSTRUCTION.
 - 5D. CAULK THE ENTIRE INTERIOR AND SEAL THE EXTERIOR PERIMETER OF ALL DOORS, STOREFRONT, CURTAIN WALL AND WINDOWS UNLESS SEALANT CONFLICTS WITH UNITS WEEPING SYSTEM OR AS DIRECTED ELSEWHERE IN THE DOCUMENTS.
 - 5E. ALL EXTERIOR DOORS ARE TO BE FULLY WEATHER-STRIPPED WITH THRESHOLDS SET IN MASTIC BED. PROVIDE RAIN GUARDS AT HEAD WHERE INDICATED.
6. FINISH NOTES:
 - 6A. CLEAN AND PRIME ALL SURFACES PRIOR TO PAINTING PER FINISH SCHEDULE & IN ACCORDANCE WITH PAINTING SPECIFICATIONS. FINISH ALL SIX SURFACES OF DOORS.
 - 6B. METAL FRAMING FOR ALL SUSPENDED GYP. BD. SOFFITS, CEILINGS, FURRING, AND OVER ALL DOORS SHALL BE SECURED TO THE STRUCTURE ABOVE AS REQUIRED FOR INSTALLATION.
 - 6C. WHERE WALL SURFACES ARE NOTED "ALIGN," THE FINISHED FACE OF NEW CONSTRUCTION IS TO ALIGN WITH THE FINISHED FACE OF OTHER NEW OR EXISTING CONSTRUCTION.
 - 6D. ALL EXPOSED STEEL TO BE PAINTED, UNLESS NOTED OTHERWISE.
 - 6E. ALL EXPOSED GYP BD WALLS, CMU WALLS, CEILINGS, AND STRUCTURE TO BE PAINTED, UNLESS NOTED OTHERWISE.
 - 6F. PROVIDE MOISTURE RESISTANT GYP BD ON ALL WALLS TO ADJACENT TO LAVATORIES, WATER CLOSETS, URINALS, AND WATER COOLERS.
 - 6G. PROVIDE CONTROL JOINTS AS SPECIFIED APPROXIMATELY EVERY 30'-0" IN CONTINUOUS GYPSUM BOARD WALLS. ALIGN GYPSUM WALL BOARD CONTROL JOINTS WITH GYPSUM BOARD CEILING CONTROL JOINTS SHOWN ON THE CEILING PLANS. COORDINATE ALL GYPSUM WALL BOARD CONTROL JOINTS WITH ARCHITECT PRIOR TO INSTALLATION.
 - 6H. WHERE WOOD IS SPECIFIED TO BE STAINED, STAIN IS TO MATCH SPECIFIED WOOD VENEER.
 - 6I. ACOUSTICAL PANELS TO BE ATTACHED OR GLUED TO WALL IN ACCORDANCE WITH THE SPECIFICATIONS. ACOUSTICAL PANELS IN THE PICTURE RAIL SYSTEM TO BE MOVABLE AND WILL NOT BE ATTACHED TO THE WALL.
7. PLUMBING NOTES:
 - 7A. THE NEW STRUCTURE SHALL BE SPRINKLERED IN ACCORDANCE WITH APPLICABLE CODES. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND COORDINATION WITH OTHER ABOVE CEILING WORK. THE DESIGN/BUILD CONTRACTOR SHALL OBTAIN ALL REQUISITE APPROVALS PRIOR TO INSTALLATION. DESIGN/BUILD CONTRACTOR'S DESIGN ENGINEER SHALL BE "ENGINEER OF RECORD" FOR THE FIRE PROTECTION SYSTEM.
8. EARTHWORK NOTES:
 - 8A. FOUNDATIONS HAVE BEEN DESIGNED FOR ALLOWABLE SOIL BEARING AS NOTED ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL COORDINATE INSPECTIONS BY OWNER PROVIDED INDEPENDENT INSPECTION AGENCY.
 - 8B. OVER EXCAVATION OF FOUNDATIONS SHALL BE FILLED ONLY AS DIRECTED BY THE STRUCTURAL ENGINEER.
 - 8C. EXTERIOR IMPROVEMENTS NOTES:
 - 8C1. REFER TO CIVIL DRAWINGS FOR PAVING THICKNESS, CURB TYPES, LONGITUDINAL AND HORIZONTAL CONTROL.
 - 8C2. REFER TO LANDSCAPE DRAWINGS FOR LANDSCAPE REQUIREMENTS
 - 8C3. FOR BUILDING LOCATION DIMENSIONS SETBACKS REFER TO CIVIL DRAWINGS
 - 8C4. ALL SIDEWALKS ARE TO BE LIGHT BROOM FINISHED UNLESS NOTED OTHERWISE. ALL SIDEWALKS ARE TO MATCH EACH OTHER AND ADJACENT, EXISTING CONDITIONS UNLESS NOTED OTHERWISE.
9. UTILITIES NOTES:
 - 9A. COORDINATE WATER (DOMESTIC AND FIRE LINE) AND GAS SERVICE LOCATIONS WITH CIVIL ENGINEER
 - 9B. COORDINATE TRANSFORMER PAD LOCATIONS WITH ELECTRICAL AND CIVIL DRAWINGS.
 - 9C. CONNECTIONS TO UNDERGROUND UTILITY LINES SHALL BE MADE BY THE CONTRACTOR. COORDINATE WITH CIVIL, PLUMBING, AND ELECTRICAL DRAWINGS.



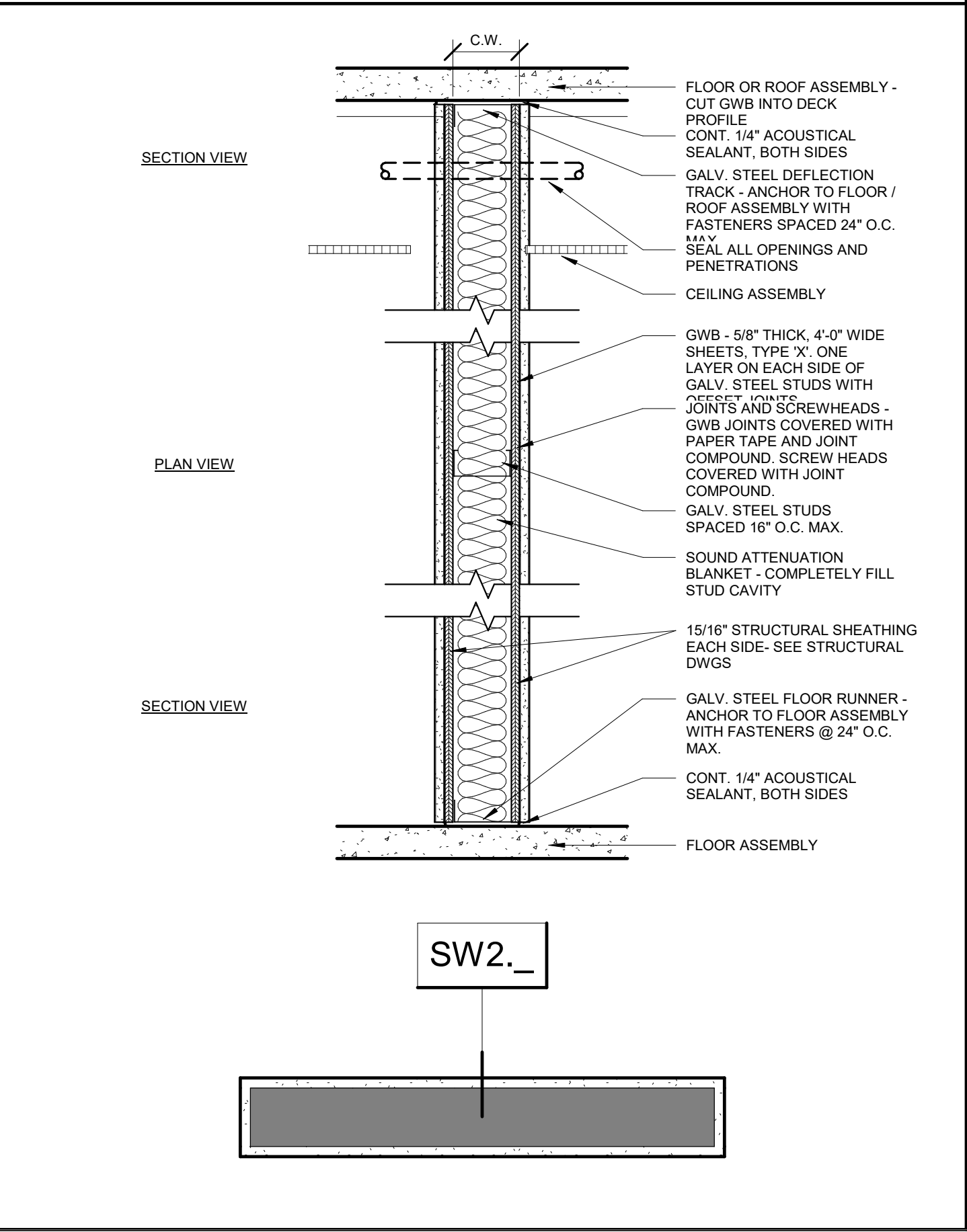
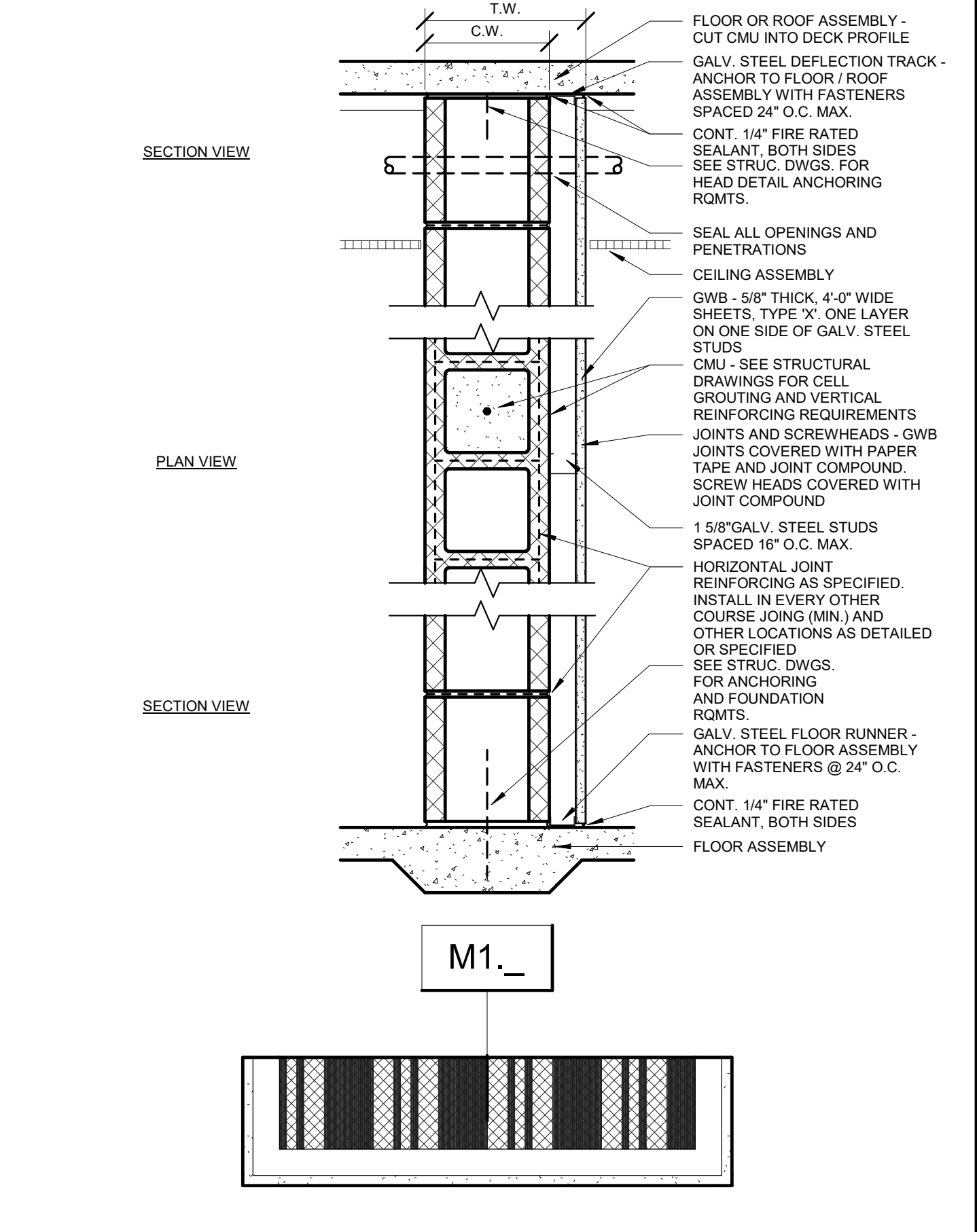
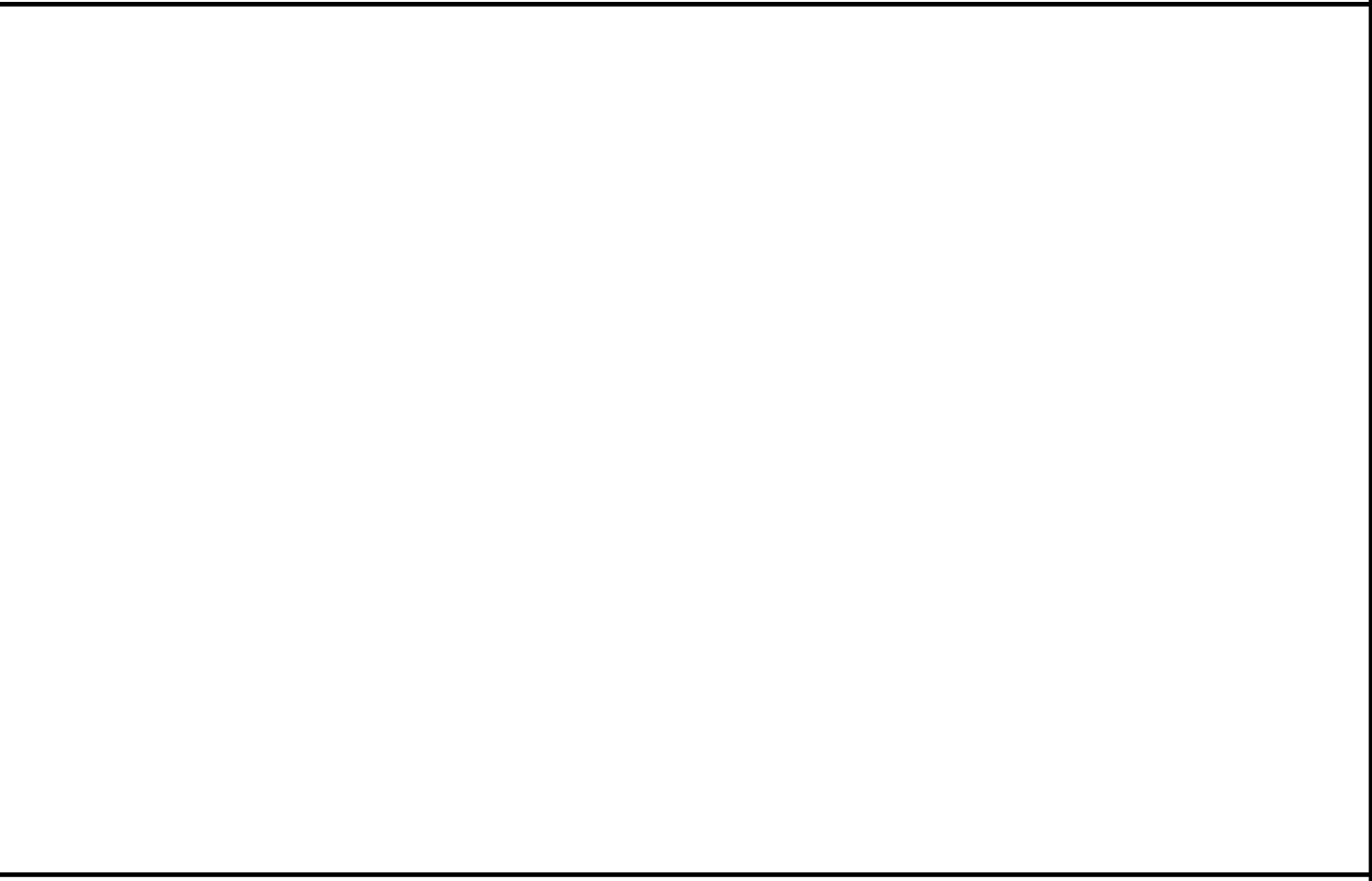
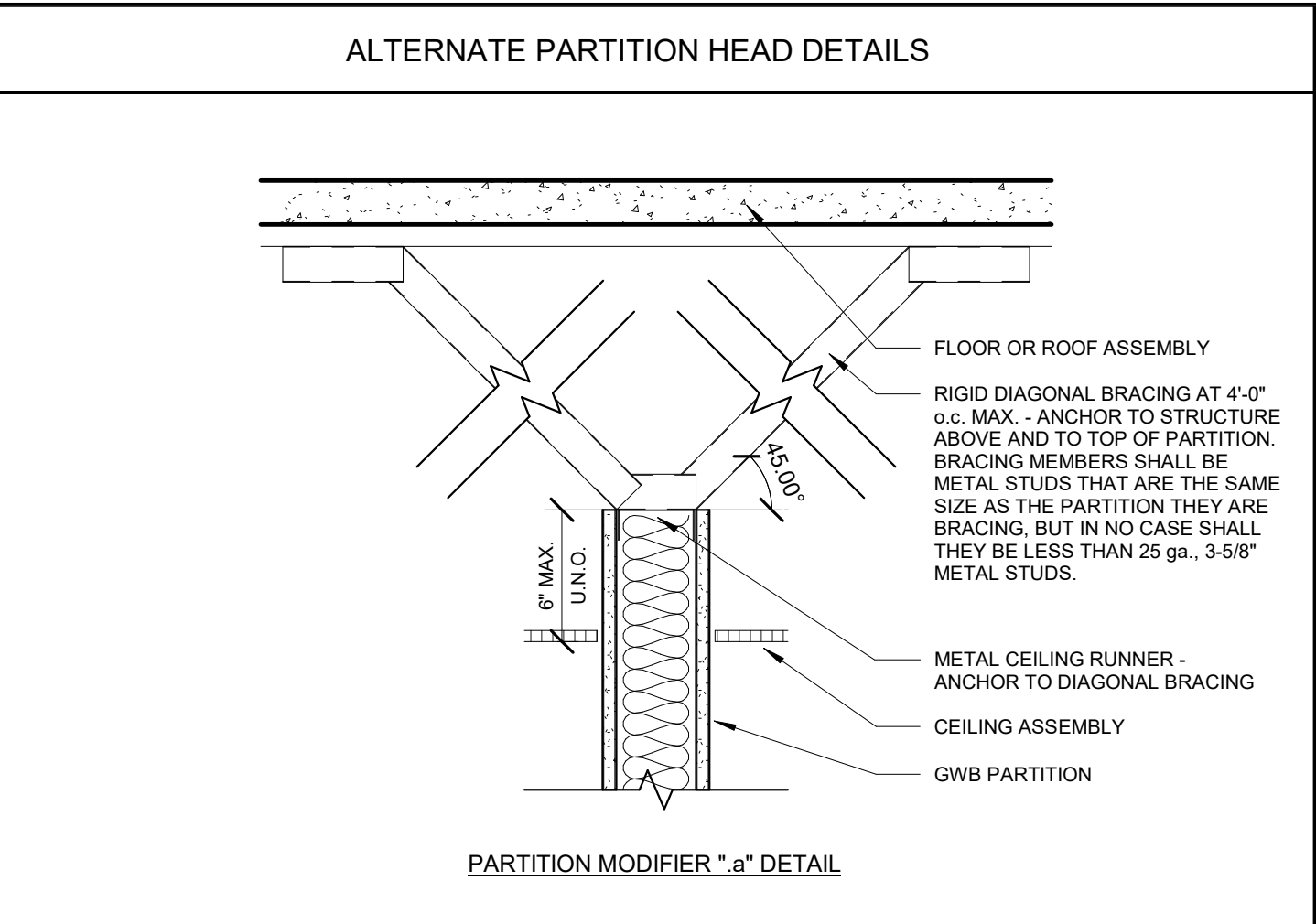
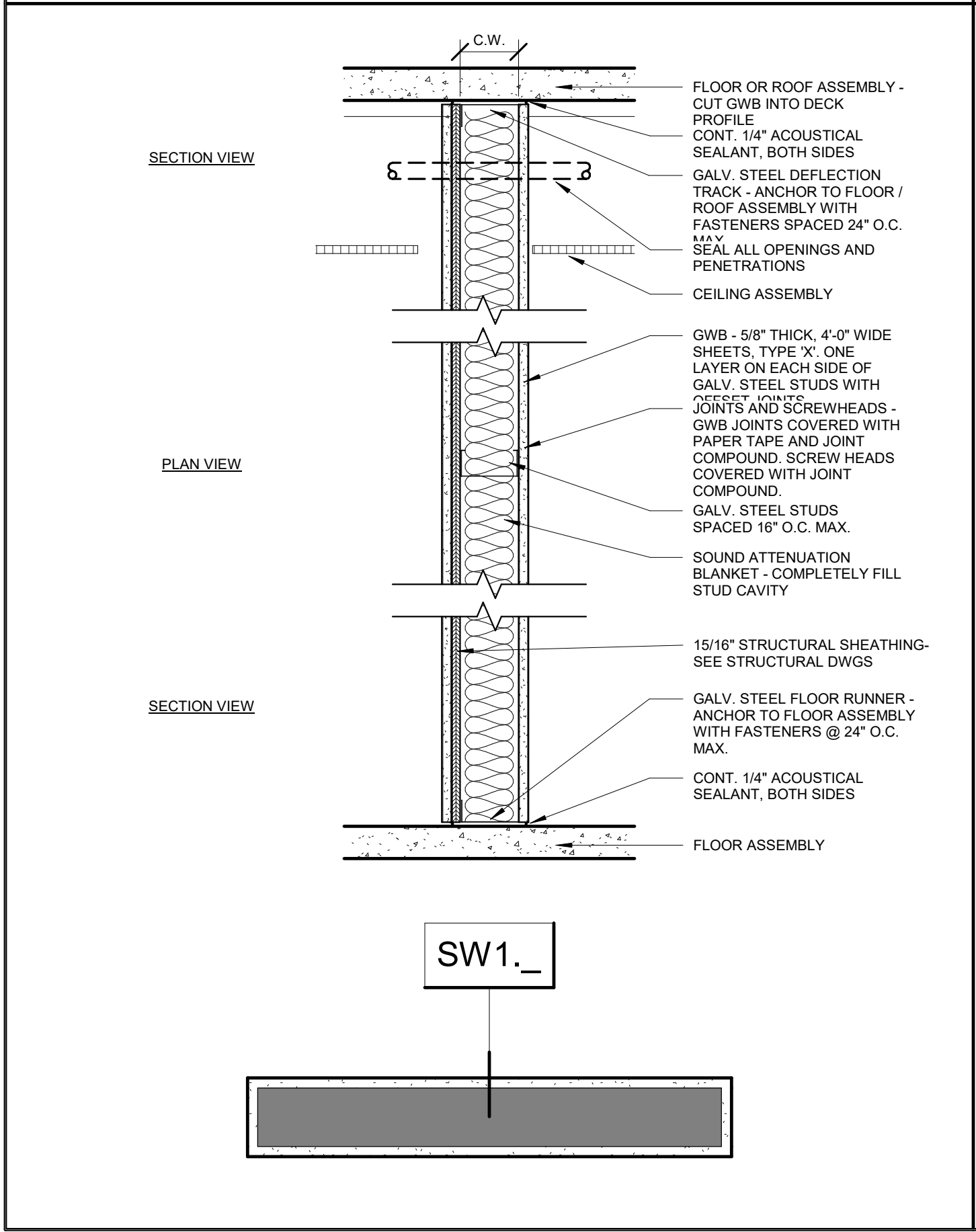
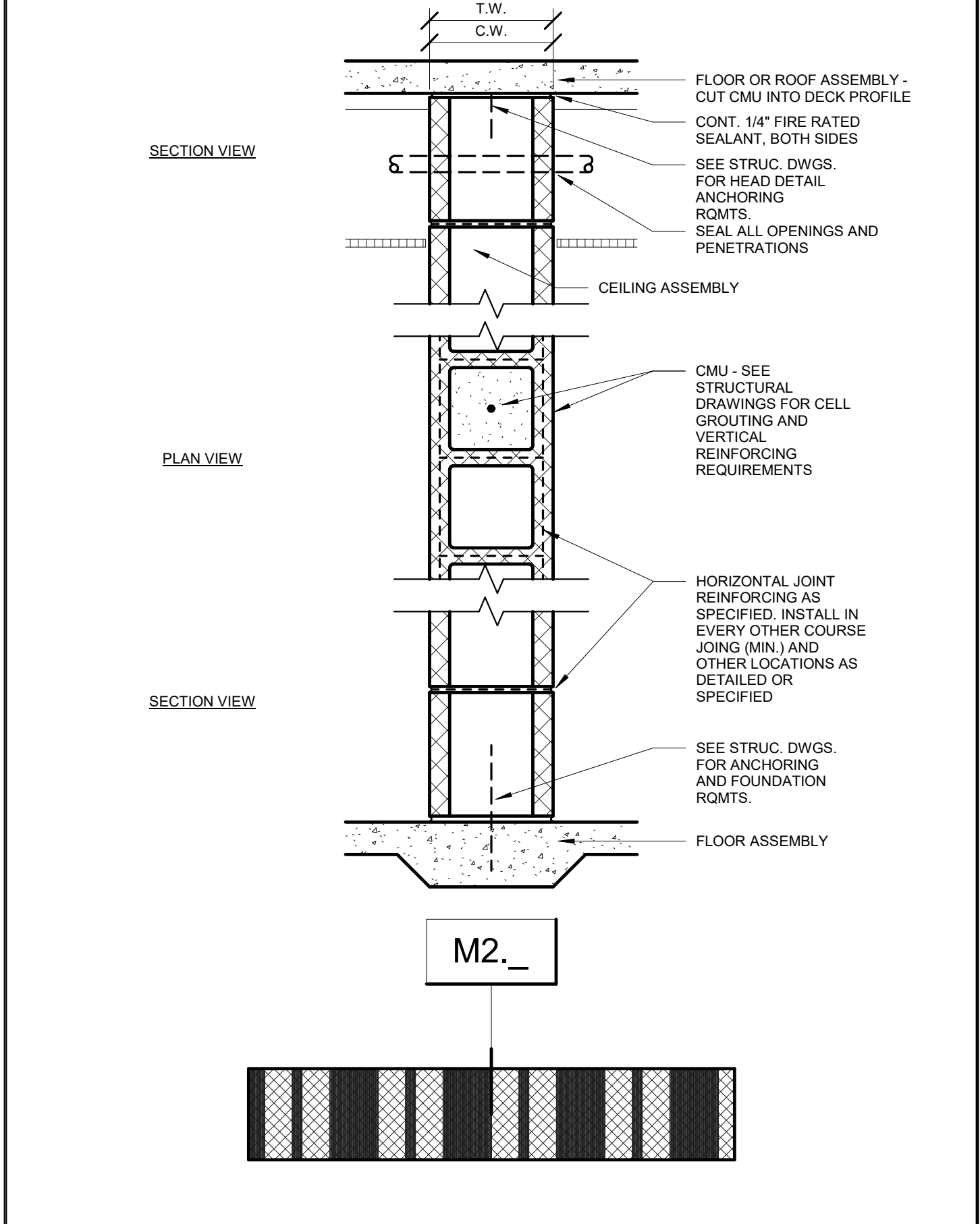
MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS

PROVIDED FOR DOOR SWING INFORMATION ONLY. DOORS SHOWN ARE NOT NECESSARILY INCLUDED IN THIS PROJECT.



PARTITION TYPE PRIORITY LEGEND	
	
FOUR-HOUR FIRE AND SMOKE WALL.....	PRIORITY 1 HIGHEST
FOUR-HOUR FIRE WALL.....	PRIORITY 2
THREE-HOUR FIRE AND SMOKE WALL.....	PRIORITY 3
THREE-HOUR FIRE WALL.....	PRIORITY 4
TWO-HOUR FIRE AND SMOKE WALL.....	PRIORITY 5
TWO-HOUR FIRE WALL.....	PRIORITY 6
TWO-HOUR FIRE AND SMOKE WALL.....	PRIORITY 7
ONE-HOUR SHAFT WALL.....	PRIORITY 8
ONE-HOUR FIRE WALL.....	PRIORITY 9
ONE-HOUR FIRE WALL.....	PRIORITY 10
NON-RATED SMOKE WALL.....	PRIORITY 11
NON-RATED WALL.....	PRIORITY 12 LOWEST
PROVIDE RATED WALLS IN ACCORDANCE WITH U.L. LISTINGS, MANUFACTURER'S INSTRUCTIONS, AND APPROVED DETAILS INDICATING HOURS OF FIRE RESISTANCE REFER TO LIFE SAFETY PLANS AND ENLARGED PLANS FOR PARTITION TYPES, LOCATIONS AND EXTENT OF RATED WALLS.	

FIRE RESISTANCE OF SINGLE-LAYER CONCRETE WALLS, FLOORS, & ROOFS - PER ACI 216.1-07										ESTIMATED STC RATINGS FOR CMU WALLS			
AGGREGATE TYPE:	MIN. EQUIV. THICK. FOR FIRE RESIST. RATING, in.					WALL THICKNESS, in.	HOLLOW		GROUT FILLING, in.	SAND FILLED		STC	STC
	1-HOUR	1.5-HOUR	2-HOUR	3-HOUR	4-HOUR		WEIGHT	STC		WEIGHT	STC		
SILICEOUS	3.5	4.3	5.0	6.2	7.0	4	20	44	38	47	20	46	
CARBONATE	3.2	4.0	4.6	5.7	6.6	6	32	46	63	51	32	49	
SEMI-LIGHTWEIGHT	2.7	3.3	3.8	4.6	5.4	8	42	48	86	55	42	52	
LIGHTWEIGHT	2.5	3.1	3.6	4.4	5.1	10	53	50	109	60	53	55	



PARTITION TYPE NOTES

1A. PARTITIONS REQUIRED BY RATING TO EXTEND TO UNDERSIDE OF FLOOR OR ROOF DECK SHALL HAVE THE PARTITION FINISH MATERIAL (GWB, CMU, ETC.) CUT TO FIT ALL SURFACES WITH A 1/4\"

1B. NON RATED PARTITIONS REQUIRED BY DRAWINGS TO EXTEND TO UNDERSIDE OF FLOOR OR ROOF DECK SHALL HAVE THE PARTITION FINISH MATERIAL (GWB, CMU, ETC.) CUT TO FIT ALL SURFACES WITH A 1/4\"

2A. RATED PARTITIONS WITH ELECTRICAL OUTLETS, SWITCH BOXES, TELEPHONE BOXES, AND OTHER SIMILAR DEVICES SHALL HAVE THE PARTITION FINISH MATERIAL (GWB, CMU, ETC.) CUT TO WITHIN A 1/8\"

2B. NON RATED PARTITIONS WITH ELECTRICAL OUTLETS, SWITCH BOXES, TELEPHONE BOXES, AND OTHER SIMILAR DEVICES SHALL HAVE THE PARTITION FINISH MATERIAL (GWB, CMU, ETC.) CUT TO WITHIN A 1/8\"

3A. AT NON-RATED PARTITIONS AND GWB FURRING, CARRY GWB TO STRUCTURAL DECK AT LOCATIONS WITH EXPOSED STRUCTURE.

3B. AT NON-RATED PARTITIONS AND GWB FURRING, SEE PARTITION TYPES FOR PARTITION TERMINATION DETAIL AT LOCATIONS WITH CEILINGS.

4A. THE BOTTOM EDGE OF ALL GYPSUM BOARD SURFACES ON RATED WALLS SHALL BE PLACED TO WITHIN 1/4\"

4B. THE BOTTOM EDGE OF ALL GYPSUM BOARD SURFACES ON NON RATED WALLS SHALL BE PLACED TO WITHIN 1/4\"

5. SMOKE PARTITIONS SHALL EXTEND FROM THE FLOOR TO THE UNDERSIDE OF THE FIRE RESISTANT RATED FLOOR/CEILING ASSEMBLY OR FIRE RESISTANT RATED ROOF/CEILING ASSEMBLY OR THE UNDERSIDE OF THE FLOOR OR ROOF DECK ABOVE. DOORS SHALL BE SELF-CLOSING OR AUTOMATIC-CLOSING UPON DETECTION OF SMOKE. DOORS SHALL NOT HAVE AIR TRANSFER OPENINGS AND SHALL NOT BE UNDERCUT IN EXCESS OF THE CLEARANCE PERMITTED IN ACCORDANCE WITH NFPA 80.

6. AT ALL RATED PARTITIONS, STENCIL RATINGS ON WALLS ABOVE CEILING. STENCILING SHALL BE A MINIMUM OF 4\"

7A. UNLESS OTHERWISE SPECIFIED, ALL SOUND ATTENUATION BLANKETS SHALL BE UNFACED MINERAL FIBER BLANKET INSULATION. FIBERGLASS-TYPE SOUND ATTENUATION BLANKET IS NOT ACCEPTABLE.

7B. UNLESS OTHERWISE SPECIFIED, ALL SOUND ATTENUATION BLANKETS SHALL BE MIN. 3.0 PCF.

7C. UNLESS OTHERWISE SPECIFIED, ALL SOUND ATTENUATION BLANKETS SHALL BE SIZED ACCORDING TO THE FOLLOWING SCHEDULE:

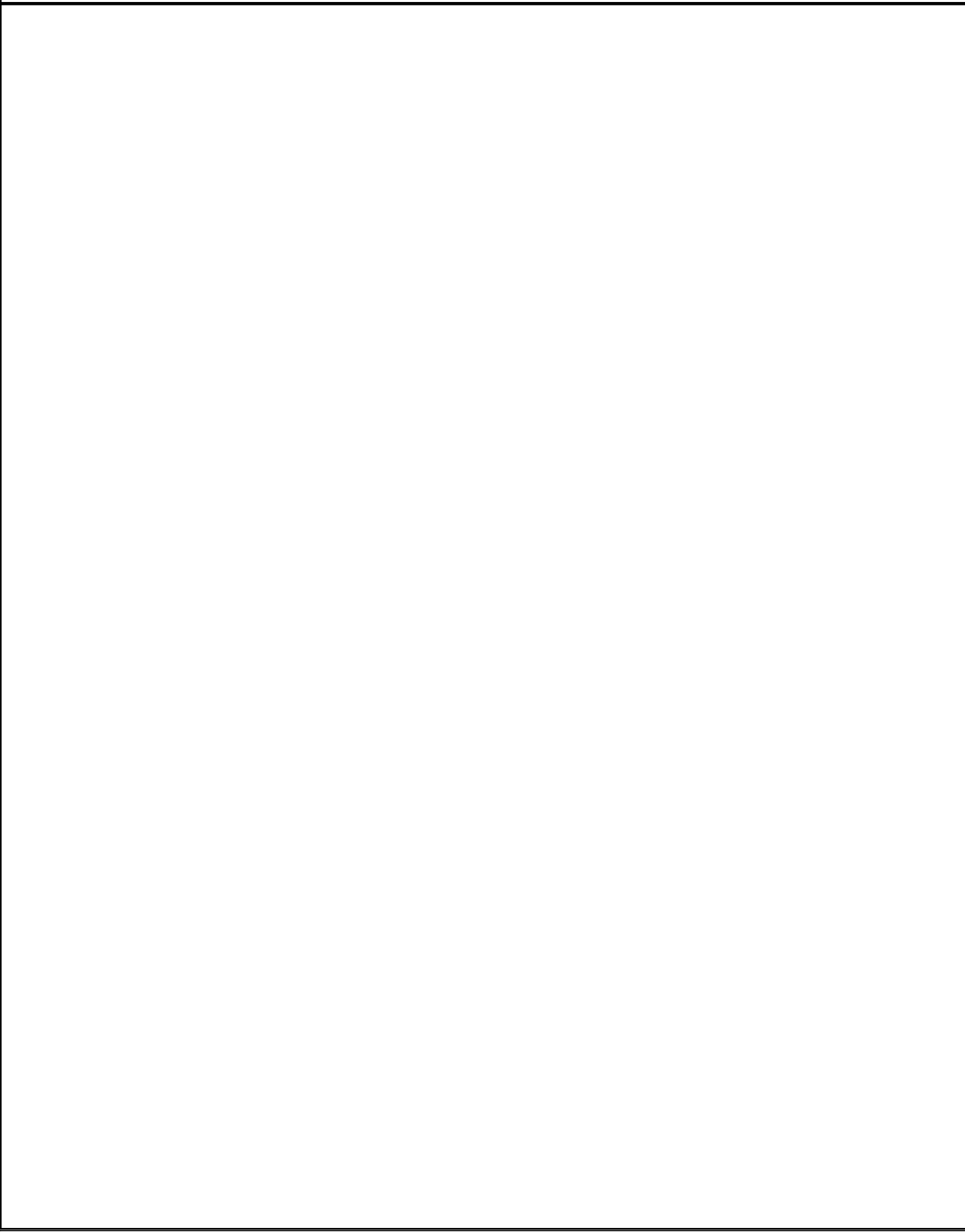
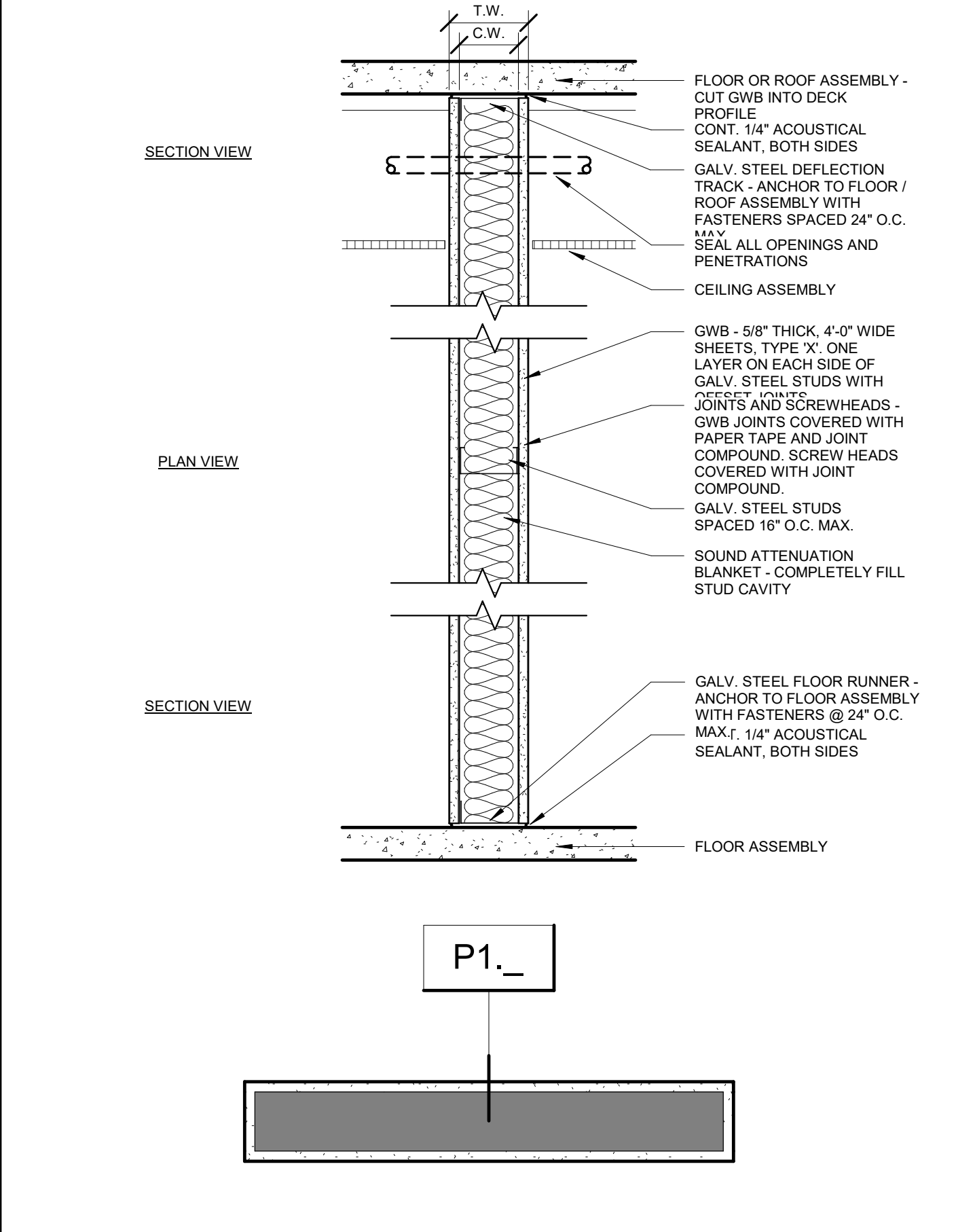
(1) 1-5/8\"

(2) 2-1/2\"

(3) 3-5/8\"

(4) 6\"

NOMINAL SIZES	ACTUAL SIZES							
	METAL STUDS	WOOD STUDS	CMU / GLASS BLOCK	METAL C-H STUDS	TILT UP CONC. WALL	RESERVED FOR FUTURE USE	RESERVED FOR FUTURE USE	RESERVED FOR FUTURE USE
0	7/8\"							
1	1-5/8\"	0.75\"	-	-	-	-	-	-
2	2-1/2\"	1.5\"	-	2.5\"	-	-	-	-
3	3-5/8\"	2.5\"	-	-	-	-	-	-
4	4\"	3.5\"	3.625\"	4\"	5.5\"	-	-	-
5	-	-	-	-	-	-	-	-
6	6\"	5.5\"	5.625\"	6\"	-	-	-	-
7	-	-	-	-	7.25\"	-	-	-
8	8\"	7.25\"	7.625\"	-	-	-	-	-
9	-	-	-	-	9.25\"	-	-	-
10	10\"	9.25\"	-	-	-	-	-	-
12	12\"	11.25\"	11.625\"	-	-	-	-	-



PARTITION TYPE TAG NOTES

FIRST DESIGNATOR - PARTITION TYPE CATEGORY (SEE LIST BELOW)
SECOND DESIGNATOR - WALL CONSTRUCTION TYPE (SEE DETAIL)
THIRD DESIGNATOR - NOMINAL CORE SIZE CATEGORY (SEE CHART BELOW)
FOURTH DESIGNATOR - MODIFIER (SEE LIST BELOW)

F1.3.r

PARTITION TYPE CATEGORY (FIRST DESIGNATOR):

C CONCRETE WALL (CAST IN PLACE)
D DEMOUNTABLE PARTITION
F GWB PARTITION WITH METAL STUDS - FIRE RATED
H GWB PARTITION WITH METAL STUDS - CHASE WALL
G GLASS
M MASONRY WALL
P GWB PARTITION WITH METAL STUDS - NON FIRE RATED
S GWB PARTITION WITH METAL STUDS - SHAFT WALL
W SHEATHING BOARD LINER - SEE STRUCTURAL DWGS FOR ADDITIONAL NOTES AND DETAILS
T TILT UP CONCRETE WALL (OR PRECAST CONCRETE)
X GWB PARTITION WITH WOOD STUDS
W GENERIC EXISTING WALL

MODIFIERS (FOURTH DESIGNATOR):

a Height of Partition Shall be 6\"

b Partition to extend up to underside of Floor or Roof Deck

c Fill Nonrouted CMU Cells with Spray Foam Insulation

d Not Used

e Not Used

f Height of Partition Shall be Flush to Ceiling Above

g GROUT ALL CMU CELLS SOLID (STC Rating Increases to 47-60)

h Not Used

i Not Used

j Not Used

k Not Used

l Not Used

m Not Used

n Not Used

o Not Used

p Not Used

q Add 1/2\"

r Smoke Wall

s Not Used

t Not Used

u Not Used

v Without Batts or Blankets

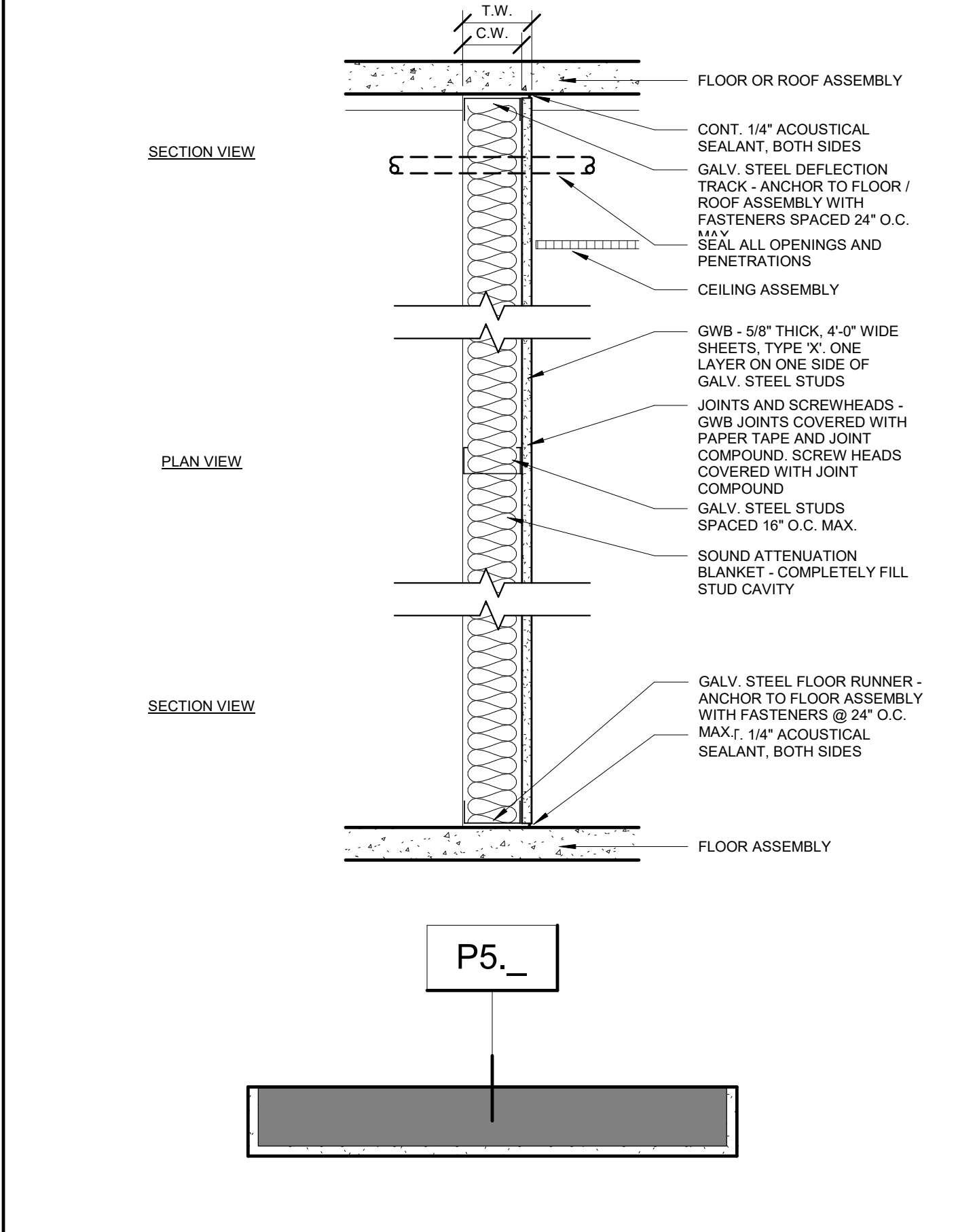
w Existing Partition

x Not Used


y Not Used

z Not Used


NOMINAL CORE SIZE CATEGORY (THIRD DESIGNATOR)								
NOMINAL SIZES	ACTUAL SIZES							
	METAL STUDS	WOOD STUDS	CMU / GLASS BLOCK	METAL C-H STUDS	TILT UP CONC. WALL	RESERVED FOR FUTURE USE	RESERVED FOR FUTURE USE	RESERVED FOR FUTURE USE
0	7/8\"							
1	1-5/8\"	0.75\"	-	-	-	-	-	-
2	2-1/2\"	1.5\"	-	2.5\"	-	-	-	-
3	3-5/8\"	2.5\"	-	-	-	-	-	-
4	4\"	3.5\"	3.625\"	4\"	5.5\"	-	-	-
5	-	-	-	-	-	-	-	-
6	6\"	5.5\"	5.625\"	6\"	-	-	-	-
7	-	-	-	-	7.25\"	-	-	-
8	8\"	7.25\"	7.625\"	-	-	-	-	-
9	-	-	-	-	9.25\"	-	-	-
10	10\"	9.25\"	-	-	-	-	-	-
12	12\"	11.25\"	11.625\"	-	-	-	-	-



PARTITION TYPE SCHEDULE									
Type Mark	Core Material	Core Width (C.W.)	Width (T.W.)	Fire Rating	Fire Test #	STC	Sound Test #	Comments	
SF1									
SF2									
SF3									
SF4									
M - Masonry									
M1.8	CMU	7.58\"	9.78\"	2 HR	ULF U805	43-51	TMS 0302-07		
M2.8	CMU	7.58\"	7.58\"	2 HR	ULF U805	43-51	TMS 0302-07		
P - GWB Partition with Metal Studs - Non Fire Rated									
P1.3b	Metal Studs	3.58\"	4.78\"			45-49	RAL TL69-42		
P1.6	Metal Studs	6\"	7.14\"			45-49	RAL TL69-42		
P5.1a	Metal Studs	1.58\"	2.14\"			28-30	Estimated		
P5.3b	Metal Studs	3.58\"	4.14\"			28-30	Estimated		
P5.6b	Metal Studs	3.58\"	6.58\"			28-30	Estimated		
SW1.3b	Metal Studs	3.58\"	5.1132\"			45-49	RAL TL69-42		
SW2.3b	Metal Studs	3.58\"	5.1316\"			45-49	RAL TL69-42		



architectural | interior | trade plans



LIFE Church, NY

275 Mamaroneck Ave. Mamaroneck, NY 10543

03.03.21

Revisions

No.	Description	Date
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Owner

275 Mamaroneck Ave. Mamaroneck, NY 10543

Project Number

20007

Date

03.03.21

PARTITION TYPES

A0.10

Architectural drawing of a mechanical room layout. The drawing shows a rectangular room with various equipment and structural requirements.

Dimensions and Layout:

- Top wall: 9' 5/8" (left section), 6' - 3 1/2" (center section), 9' 5/8" (right section).
- Right wall: 7' - 4" (main section), 9' 5/8" (bottom section).
- Room width: 14' 0" (indicated by a dimension line on the left).
- Room depth: 14' 0" (indicated by a dimension line on the bottom).

Equipment and Features:

- AS PER MFG. REQUIREMENTS:** Indicated for the top wall and the right wall.
- ACCESS LADDER BY ELEV. MFG.** Located on the right wall.
- SUMP PUMP - (SEE PLUMBING DRAWINGS) W/ CAST IRON COVER** Located in the bottom right corner.
- EXISTING TRIPLE WYTHE BRICK WALL TO REMAIN** Indicated on the left wall.
- EXISTING DOUBLE WYTHE BRICK WALL TO REMAIN** Indicated on the bottom wall.
- OPENING AT LEVEL ABOVE** Indicated on the left wall.
- NOTE** Located in the center of the room.
- M1.8** and **M2.8** labels are present near the equipment.

Annotations and Markers:

- 1** (in a triangle) with **A4.10** below it, pointing to the left wall.
- A** (in a circle) located at the bottom left corner.

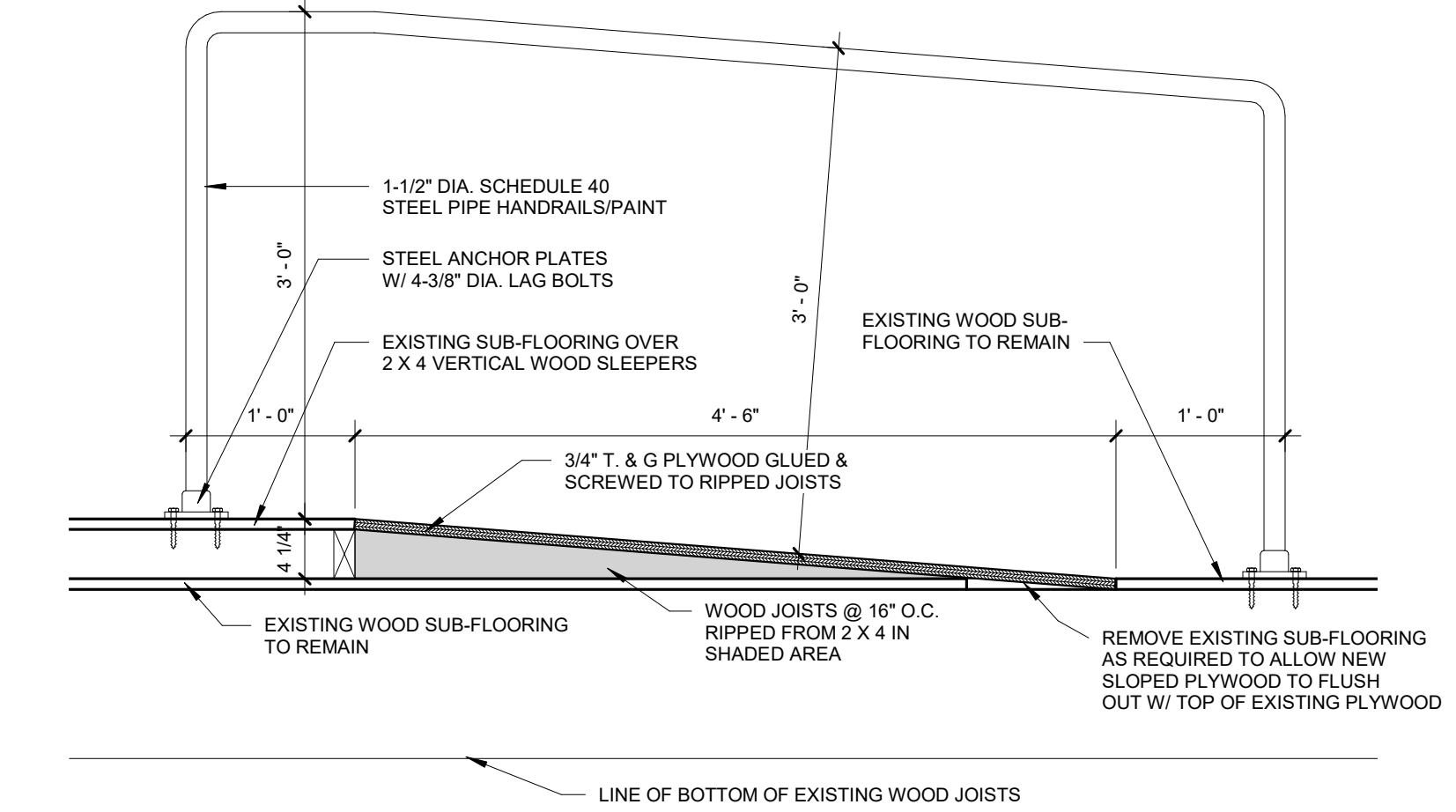
4 ENLARGED BASEMENT ELEVATOR PLAN
3/8" = 1'-0"

Sanctuary and Administrative Building Floor Plan

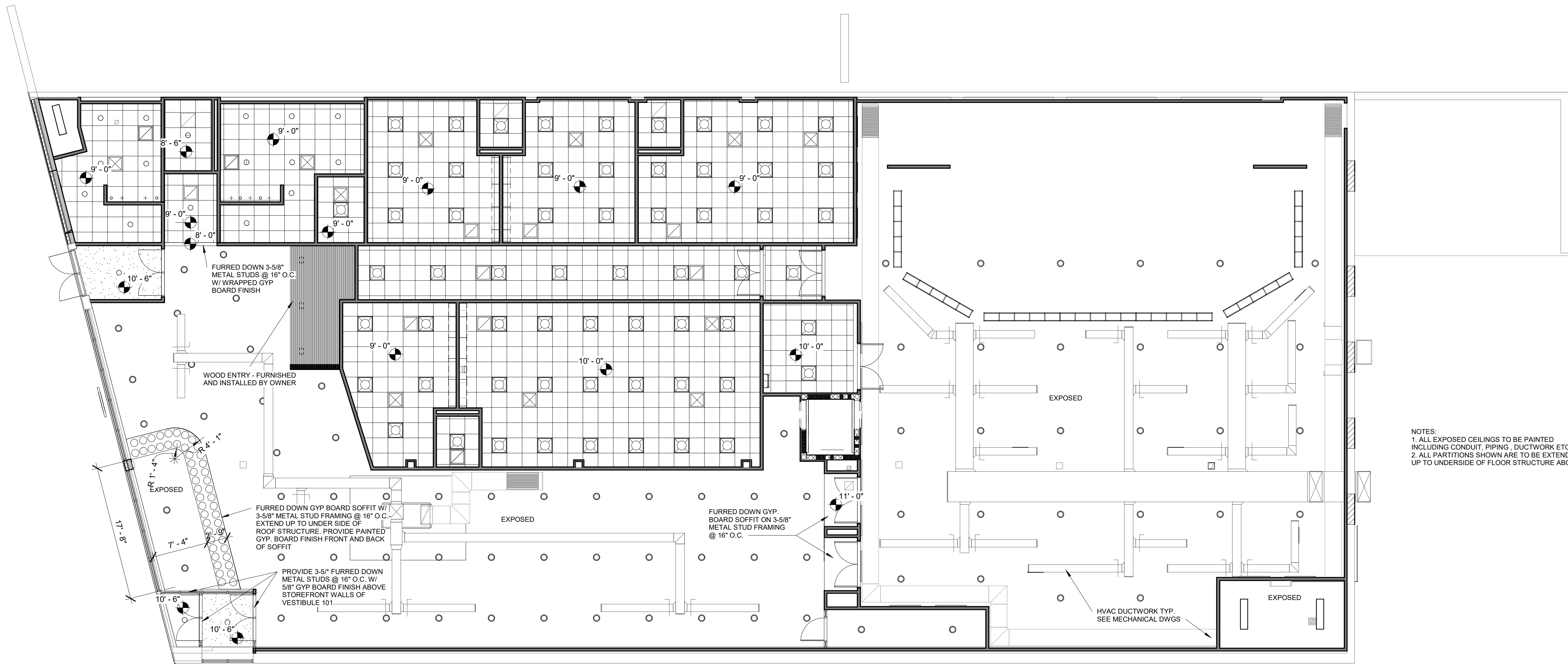
Sanctuary Area:

- Worship [115]:** 345 SEATS. NOTE: SEE INTERIOR ELEVATIONS OF SANCTUARY ON SHEET A8.00 FOR LAYOUT AND QUANTITY OF ACOUSTIC WALL PANELS.
- Platform [116]:** RAMP BY PLATFORM MFG. W/ SAFETY RAILINGS / HANDRAILS BY PLATFORM MFG.
- Control Booth [120]:** 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 7

3 SLOPED FLOORING DTL.
1" = 1'-0"



3 SLOPED FLOORING DTL.
1" = 1'-0"



1 01 - FIRST FLOOR REFLECTED CEILING PLAN
1/8" = 1'-0"



2 00 - BASEMENT REFLECTED CEILING PLAN
1/8" = 1'-0"

CEILING LEGEND	
EXP. PT.	EXPOSED TO STRUCTURE & PAINTED
	2' x 2' LAY-IN CEILING PANELS ACT
	2' x 4' LAY-IN CEILING PANELS ACT
	GYPSUM BOARD
	SURFACE MOUNTED DOWN LIGHT, 6" DIAMETER
	RECESSED DOWNLIGHT, 6" DIAMETER
	RECESSED LAY-IN 2'x2'
	RECESSED LAY-IN 2'x4'
	EXIT SIGN
	WALL MOUNTED LIGHT FIXTURE
	SUPPLY AIR DIFFUSER
	RETURN AIR DIFFUSER
	PENDANT MOUNTED LINEAR
	SURFACE MOUNTED ROUGH SERVICE
	SURFACE MOUNTED 2'x4'
	SURFACE MOUNTED 1'x4'
	SURFACE MOUNTED CYLINDER, 6" DIAMETER
	PENDANT CYLINDER, 6" DIAMETER

NOTES:
1. ALL EXPOSED CEILINGS TO BE PAINTED INCLUDING CONDUIT, PIPING, DUCTWORK ETC.
2. ALL PARTITIONS SHOWN ARE TO BE EXTENDED UP TO UNDERSIDE OF FLOOR STRUCTURE ABOVE

HVAC DUCTWORK TYP. SEE MECHANICAL DWGS

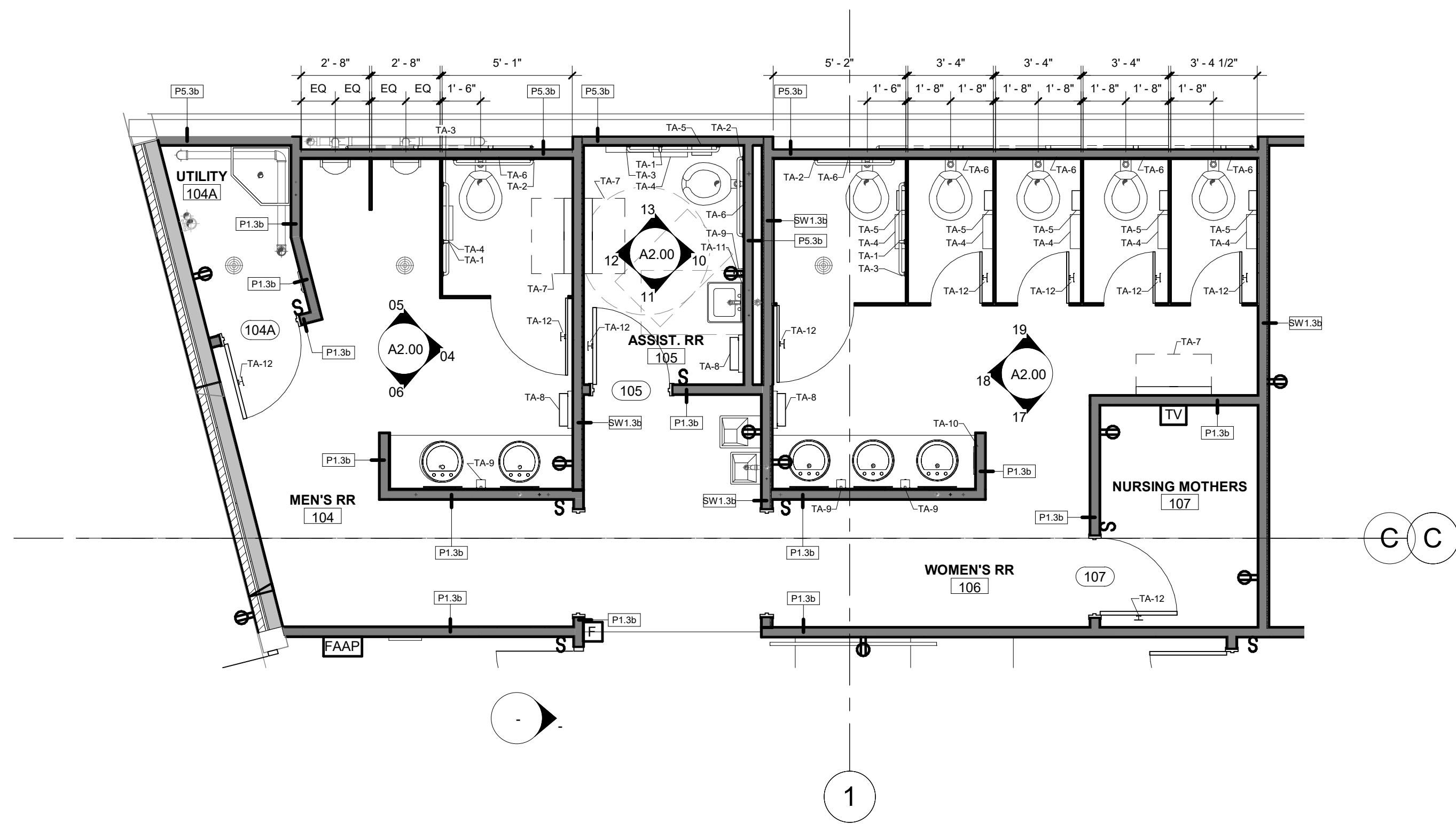
NOTES:
1. ALL EXPOSED CEILINGS TO BE PAINTED INCLUDING CONDUIT, PIPING, DUCTWORK ETC.
2. ALL PARTITIONS SHOWN ARE TO BE EXTENDED UP TO UNDERSIDE OF FLOOR STRUCTURE ABOVE

INTERIOR ELEVATIONS GENERAL

NOTES:

- 1) MATCH WALL TILE INSTALLATION AS SHOWN ON ELEVATIONS.
- 2) PROVIDE BLOCKING IN WALL FOR ALL TOILET ACCESSORIES & FUTURE TOILET ACCESSORIES.
- 3) PROVIDE BLOCKING IN WALL FOR METAL BRACKETS AS REQUIRED.
- 4) ALL TOILET ACCESSORIES TO BE STAINLESS STEEL WITH A SATIN FINISH, EXCEPT FOR TOILET ACCESSORIES IN SINGLE RESTROOMS IN APARTMENT UNITS, WHICH IS TO BE STAINLESS STEEL WITH A BRIGHT POLISH FINISH.

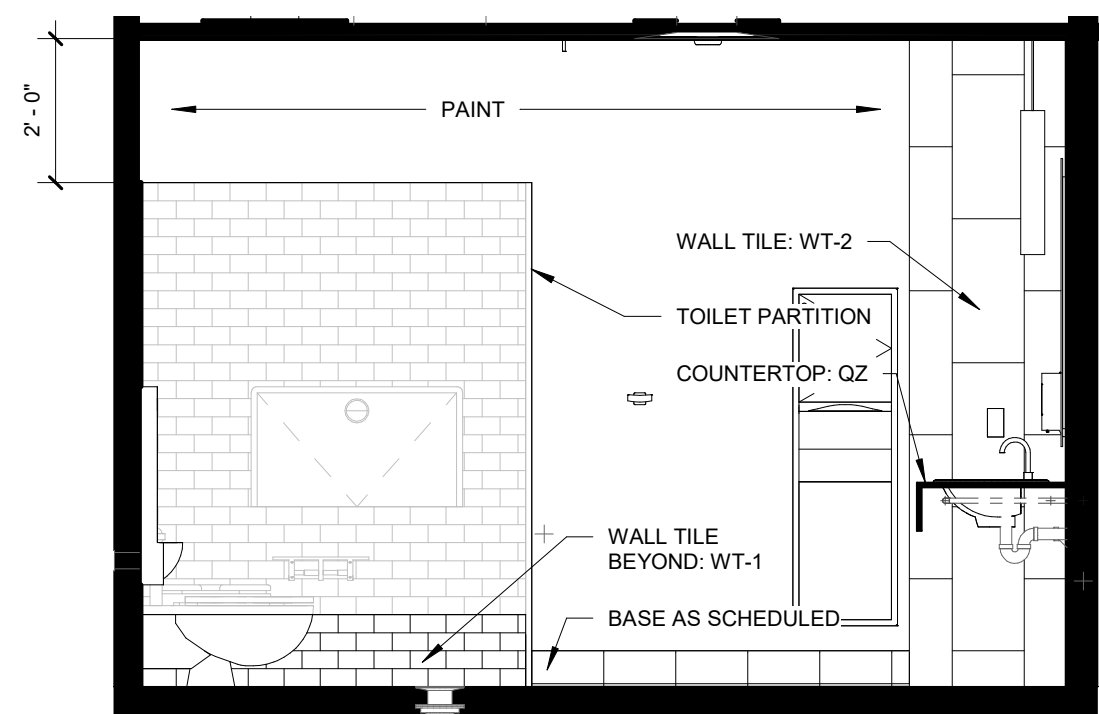
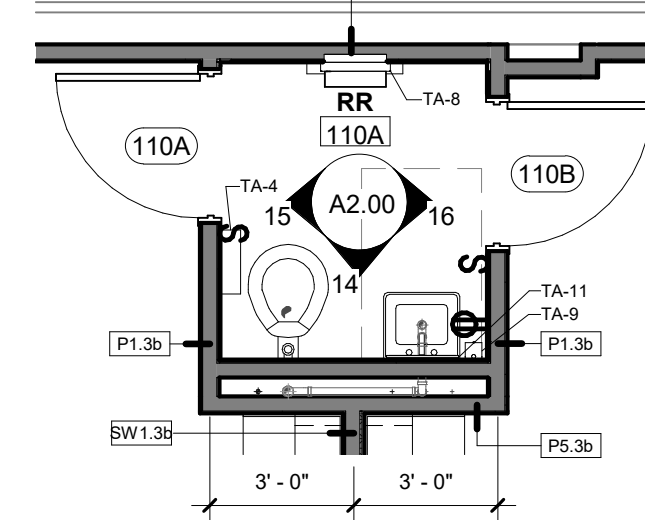
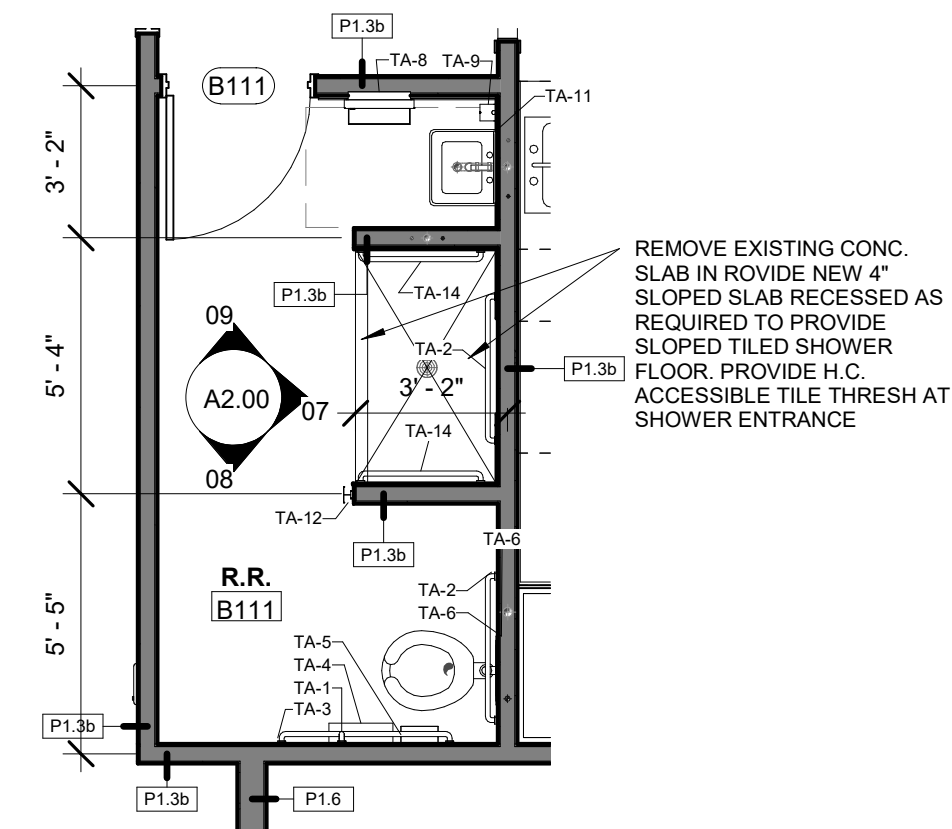
TOILET ACCESSORY LEGEND			
DESIGNATION	DESCRIPTION	MANUFACTURER	MODEL NO.
TA-1	STAINLESS STEEL GRAB BAR 18" (1-1/4" DIA.)	BOBRICK	B6806.99 X 18
TA-2	STAINLESS STEEL GRAB BAR 36" (1-1/4" DIA.)	BOBRICK	B6806.99 X 36
TA-3	STAINLESS STEEL GRAB BAR 42" (1-1/4" DIA.)	BOBRICK	B6806.99 X 42
TA-4	STAINLESS STEEL SURFACE MOUNTED TOILET TISSUE DISPENSER W/ SHELF	BOBRICK	B-2840
TA-5	STAINLESS STEEL SURFACE MOUNTED SANITARY NAPKIN DISPOSAL	BOBRICK	B-270
TA-6	STAINLESS STEEL RECESSED SEAT COVER DISPENSER	BOBRICK	B-301
TA-7	STAINLESS STEEL SURFACE MOUNTED BABY CHANGING STATION	BOBRICK	KB110-SSWM
TA-8	SEMI-RECESSED COMBINATION TOWEL & WASTE UNIT	BOBRICK	B-3942
TA-9	STAINLESS STEEL SURFACE MOUNTED FOAM SOAP DISPENSER	BOBRICK	B-2013
TA-10	STAINLESS STEEL RECESSED PAPER TOWEL DISPENSER	BOBRICK	B-35903
TA-11	FRAMED MIRROR 24"x36"	BOBRICK	B-290 2436
TA-12	SURFACE MOUNTED DOUBLE ROBE HOOK	BOBRICK	B-6727
TA-14	STAINLESS STEEL GRAB BAR 30" (1-1/4" DIA.)	BOBRICK	B6806.99 X 36



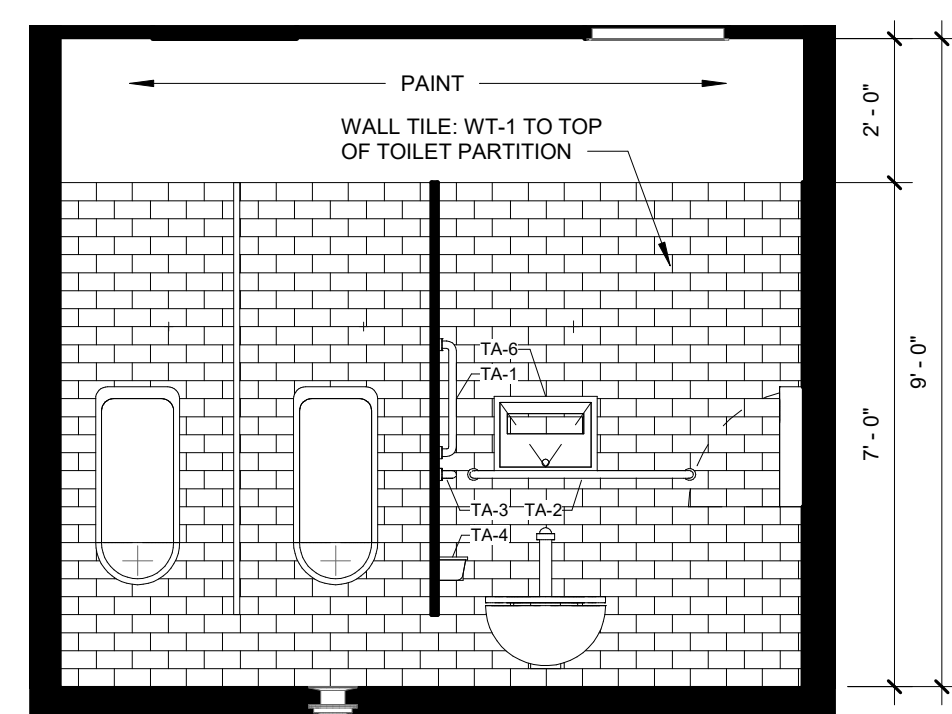
01 ENLARGED LOBBY RESTROOMS
1/4" = 1'-0"

02 ENLARGED BASEMENT RR
1/4" = 1'-0"

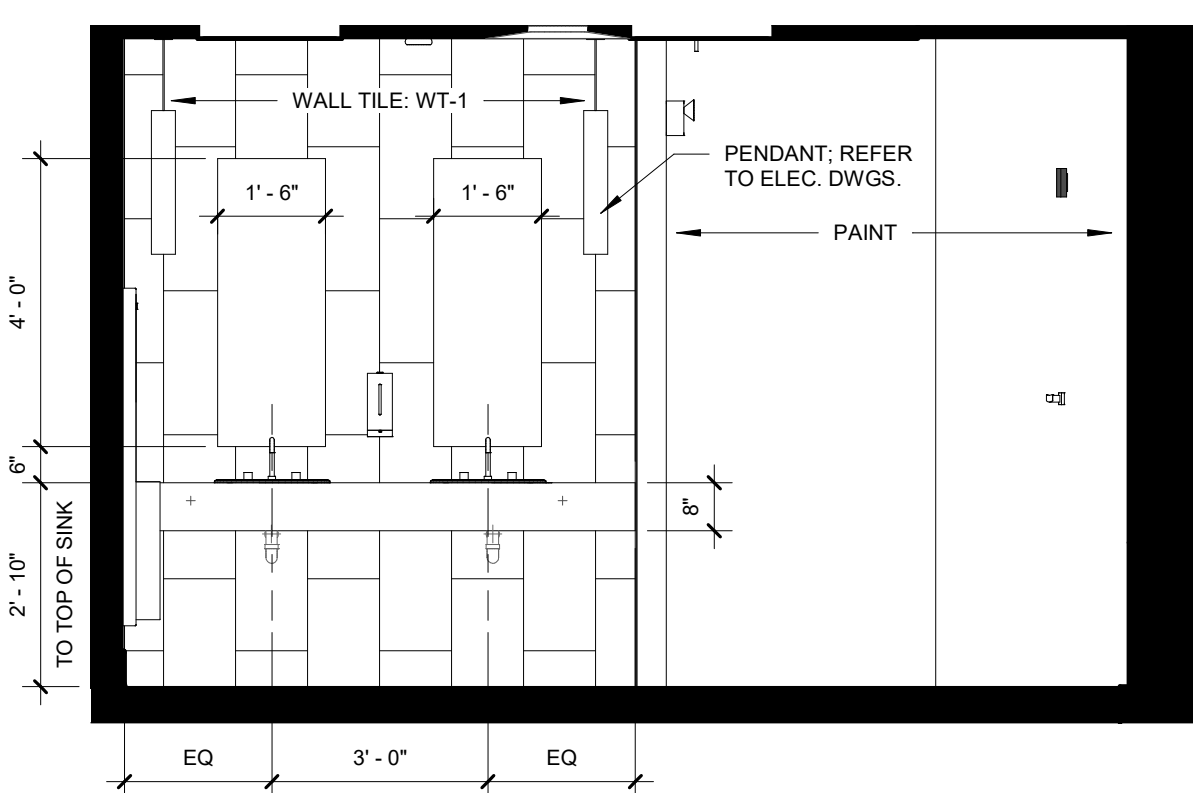
03 ENLARGED TYP. KIDS RR
1/4" = 1'-0"



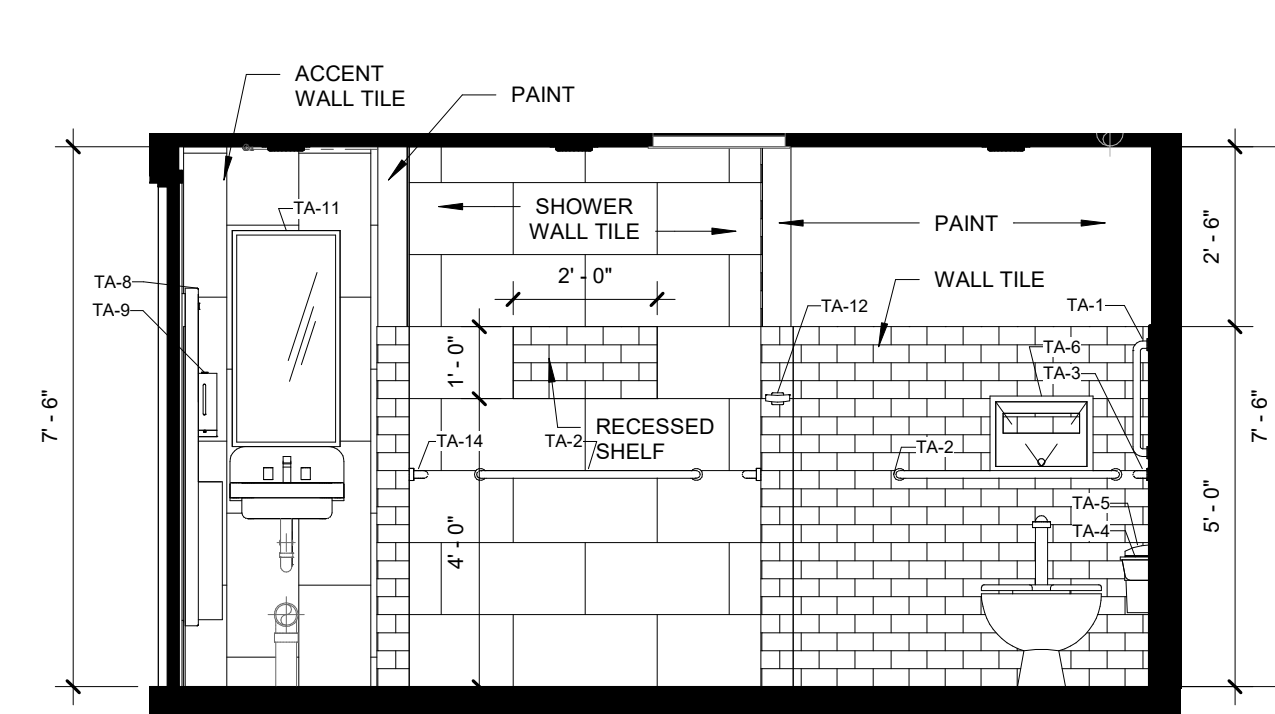
04 104 MEN'S RESTROOM_01
3/8" = 1'-0"



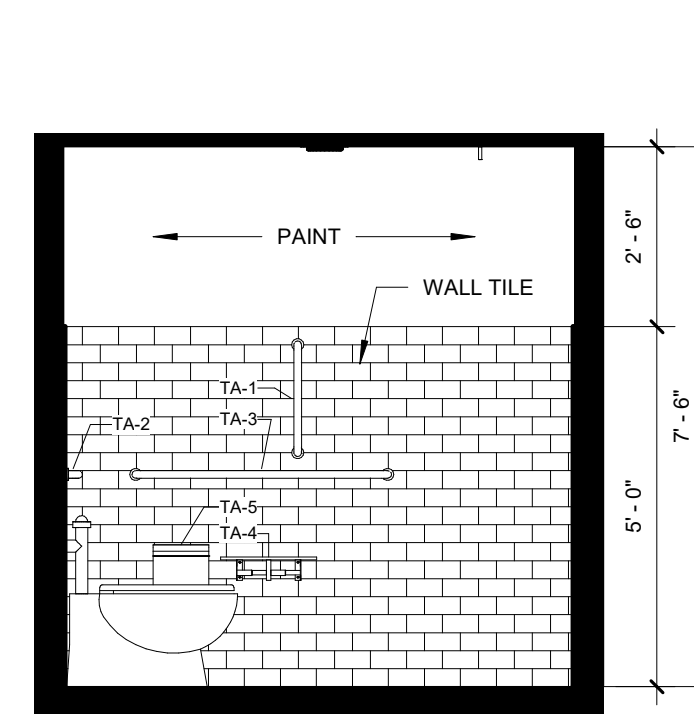
05 104 MEN'S RESTROOM_02
3/8" = 1'-0"



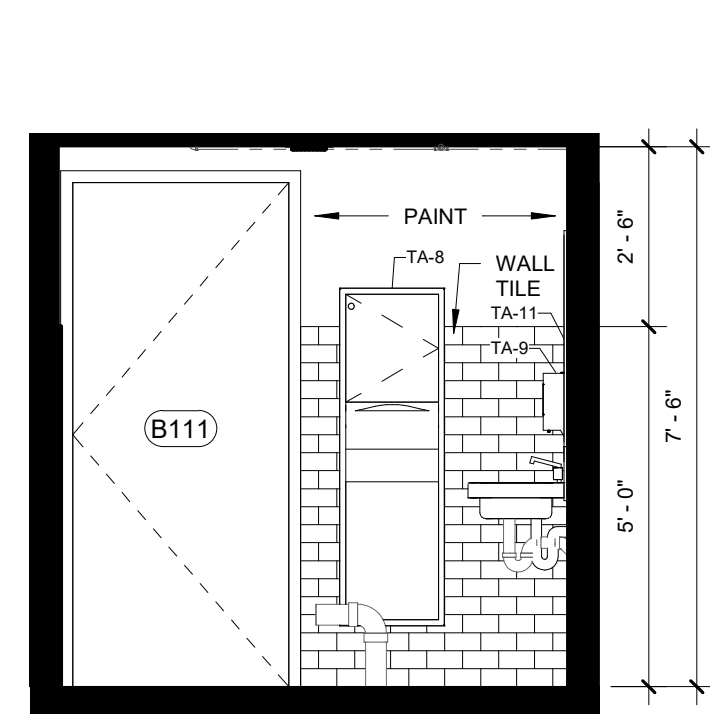
06 104 MEN'S RESTROOM_03
3/8" = 1'-0"



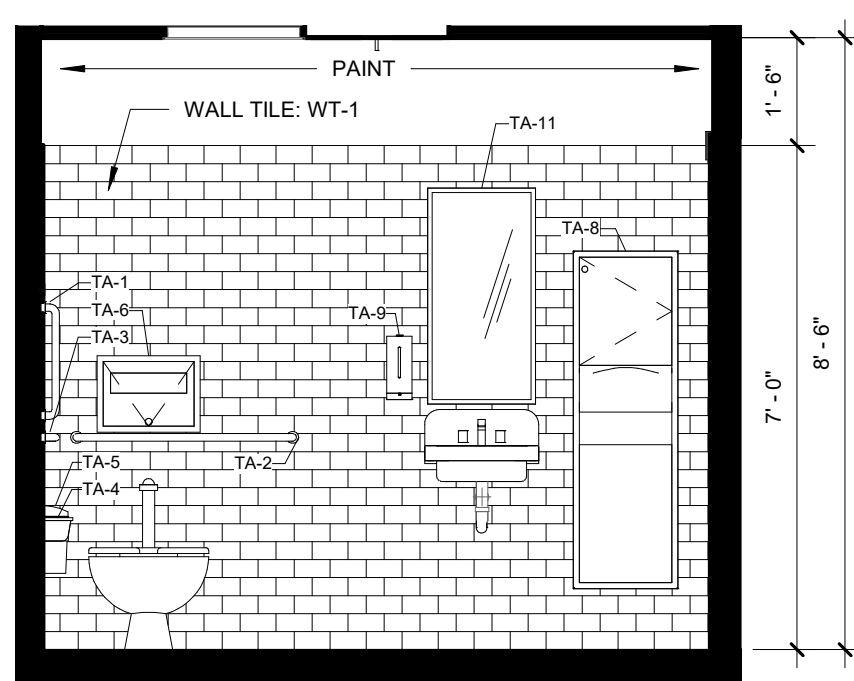
07 B111_RR_01
3/8" = 1'-0"



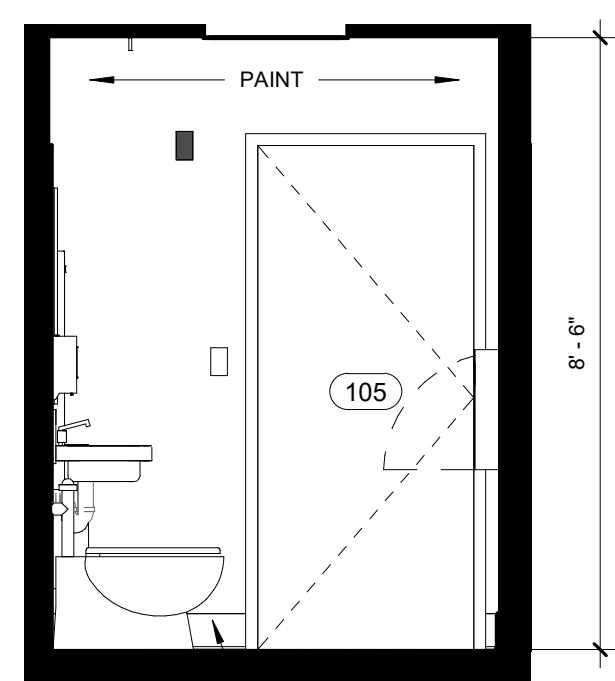
08 B111_RR_02
3/8" = 1'-0"



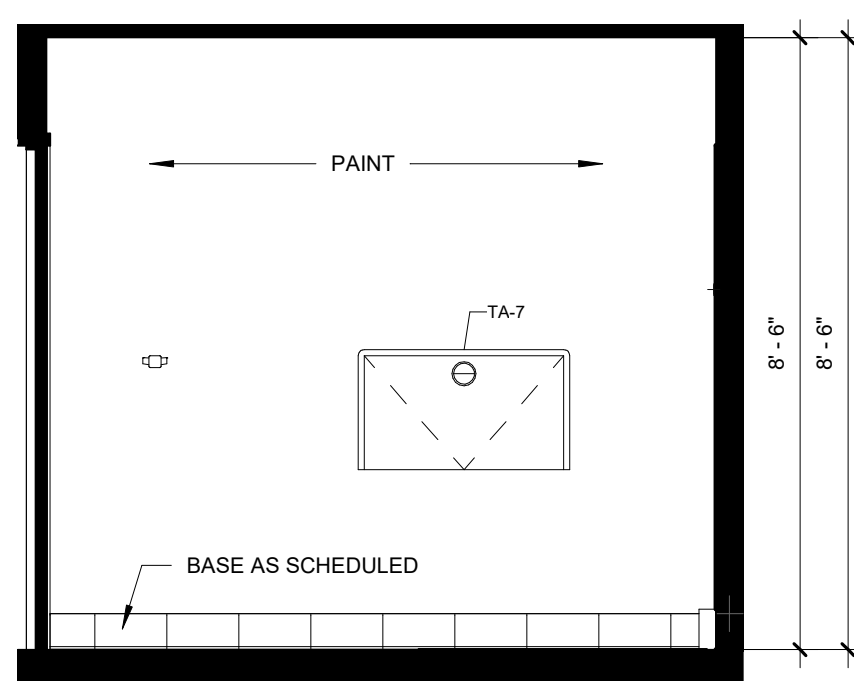
09 B111_RR_03
3/8" = 1'-0"



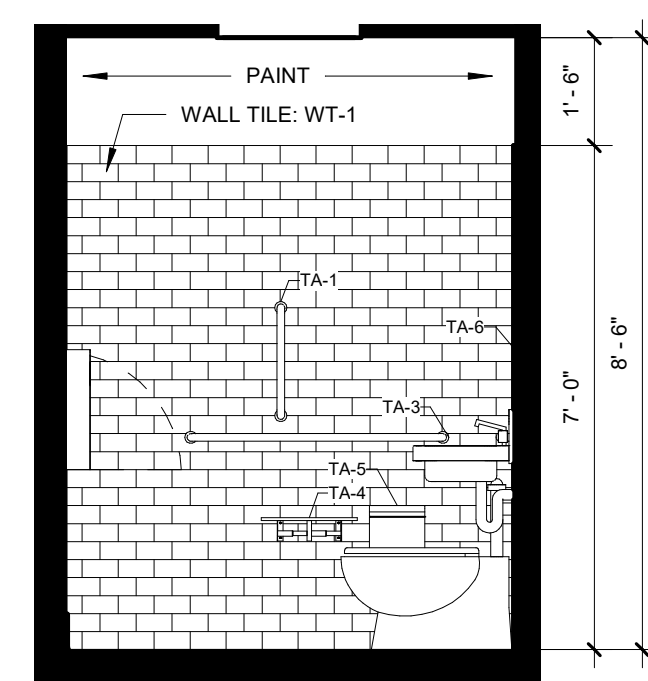
10 105 ASSIST RESTROOM_01
3/8" = 1'-0"



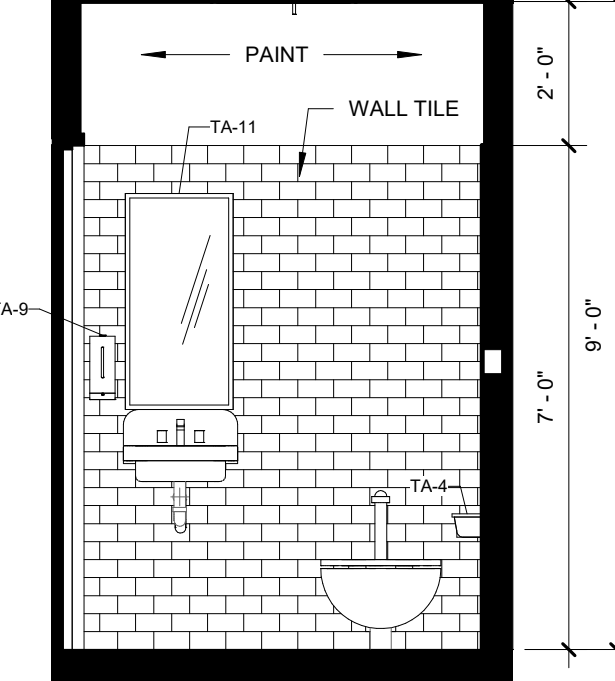
11 105 ASSIST RESTROOM_02
3/8" = 1'-0"



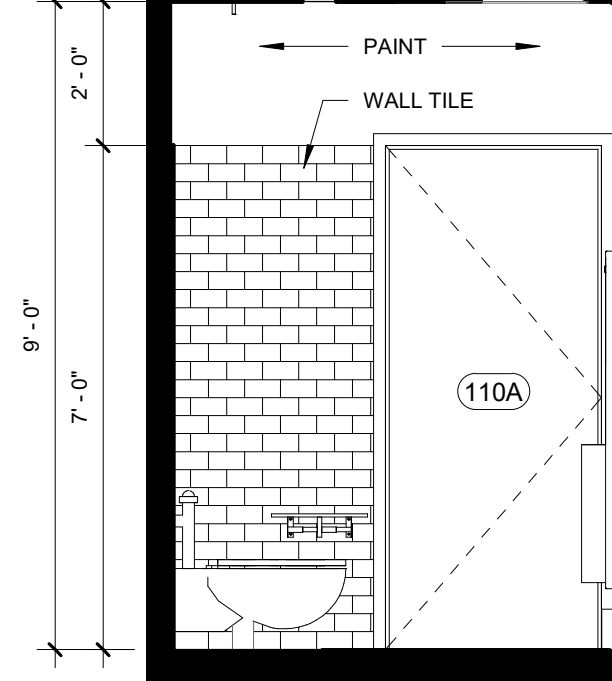
12 105 ASSIST RESTROOM_03
3/8" = 1'-0"



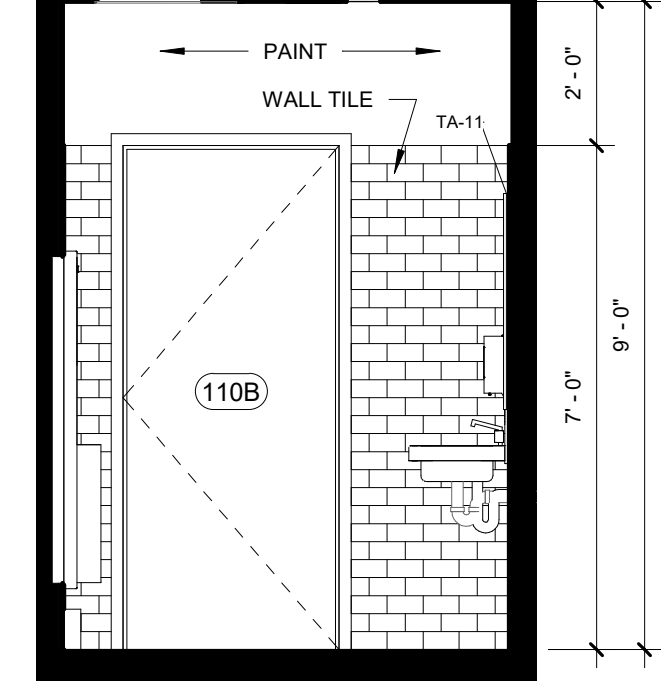
13 105 ASSIST RESTROOM_04
3/8" = 1'-0"



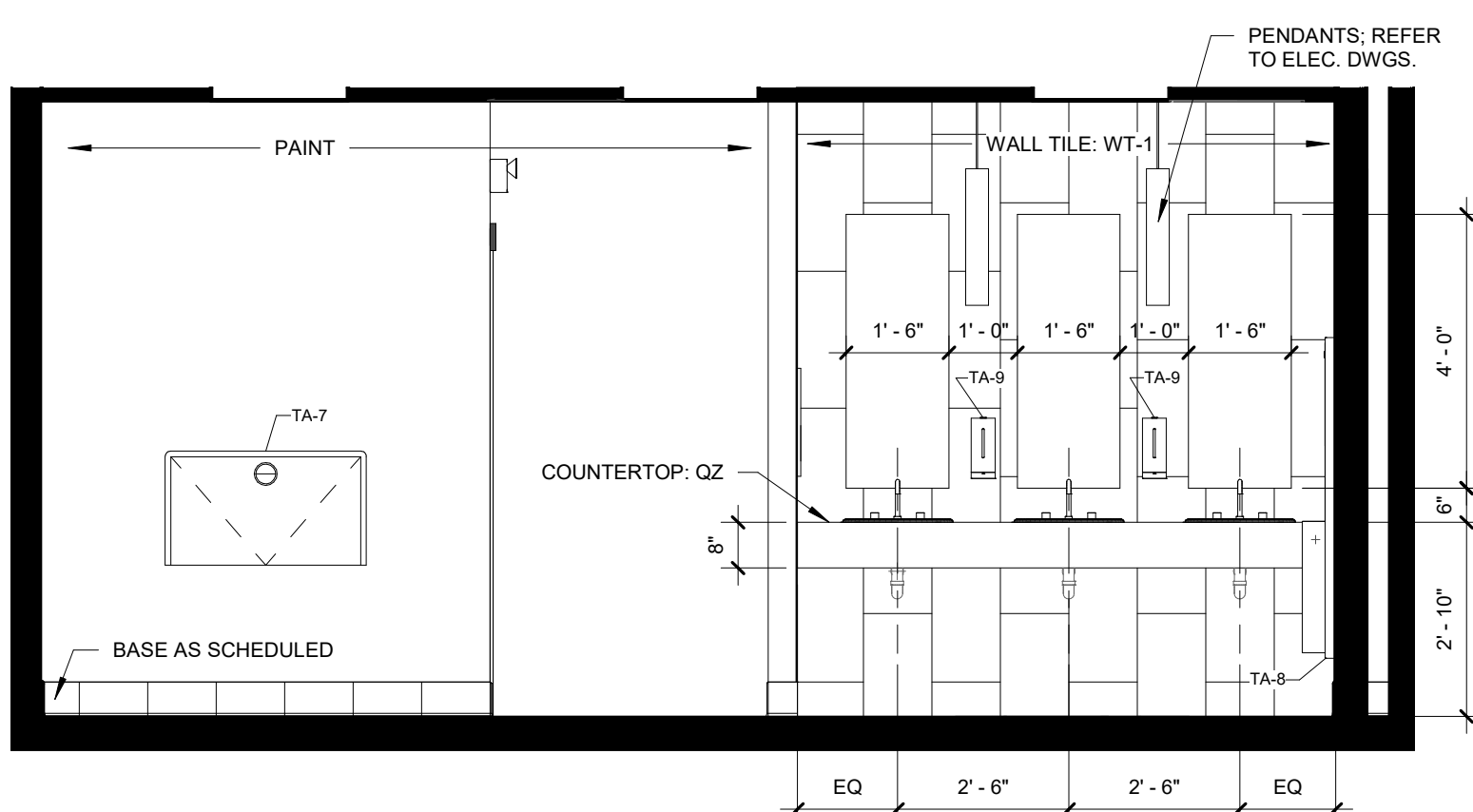
14 TYP. KIDS RR_01
3/8" = 1'-0"



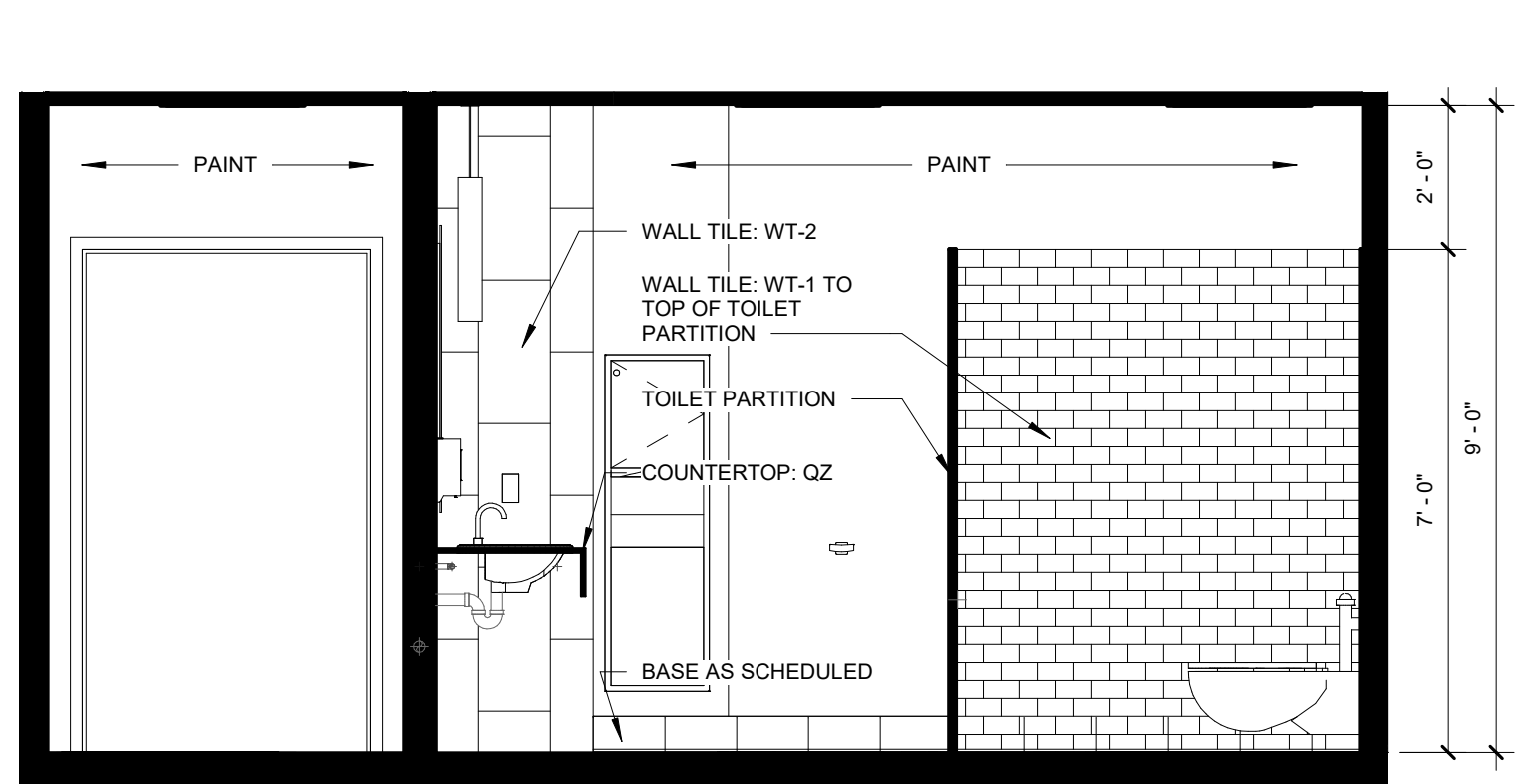
15 TYP. KIDS RR_02
3/8" = 1'-0"



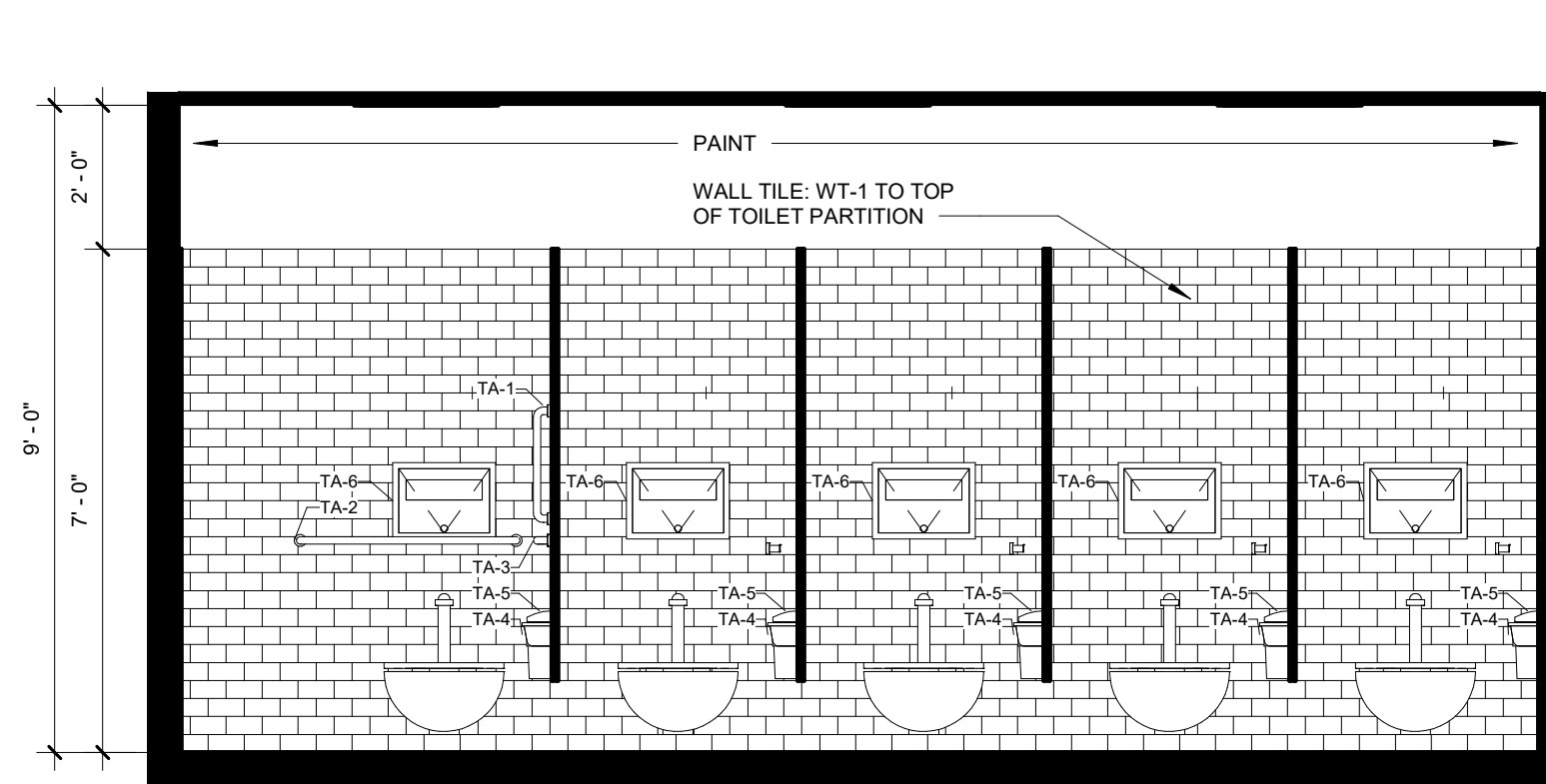
16 TYP. KIDS RR_03
3/8" = 1'-0"



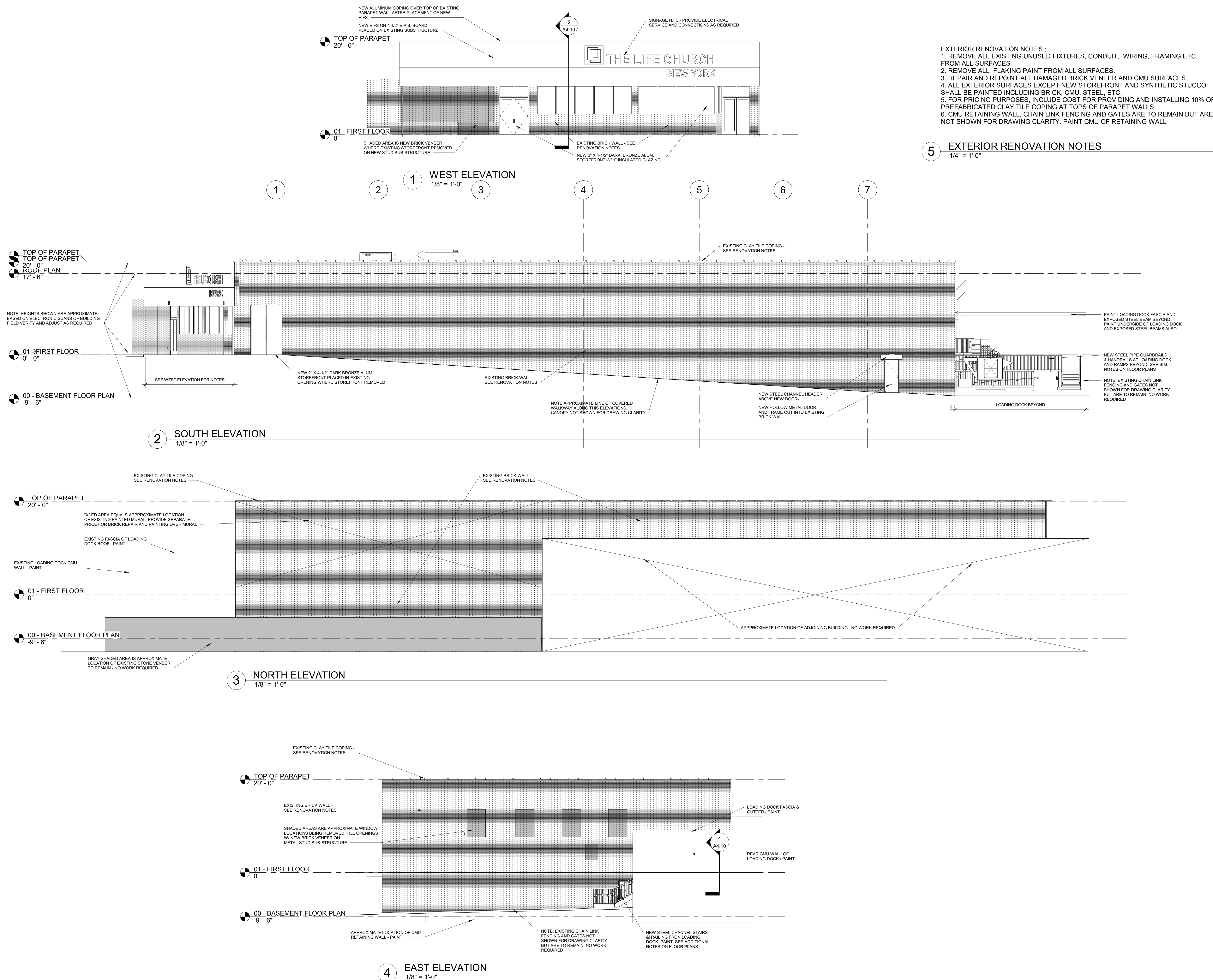
17 106 WOMEN'S RESTROOM_01
3/8" = 1'-0"

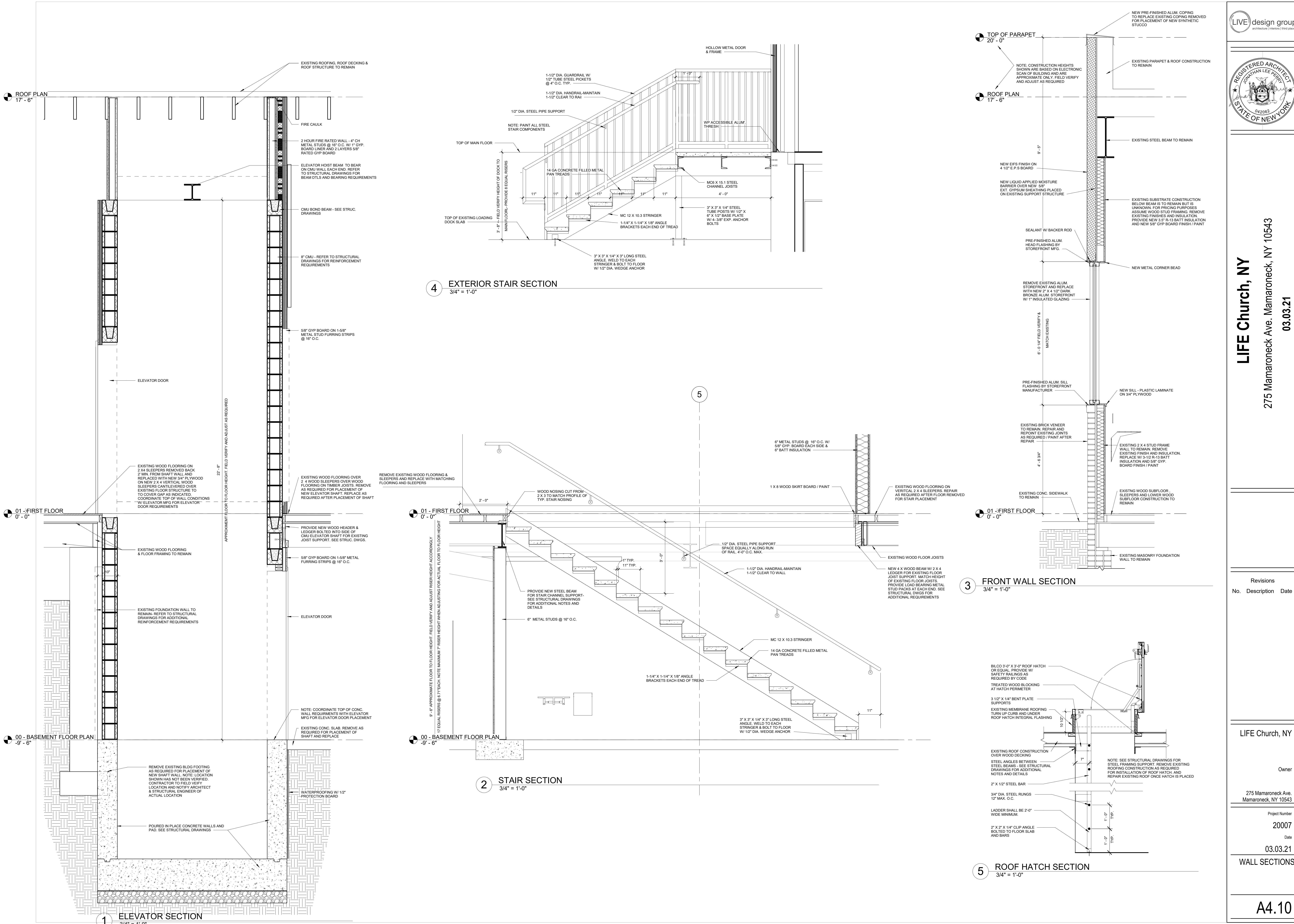


18 106 WOMEN'S RESTROOM_02
3/8" = 1'-0"

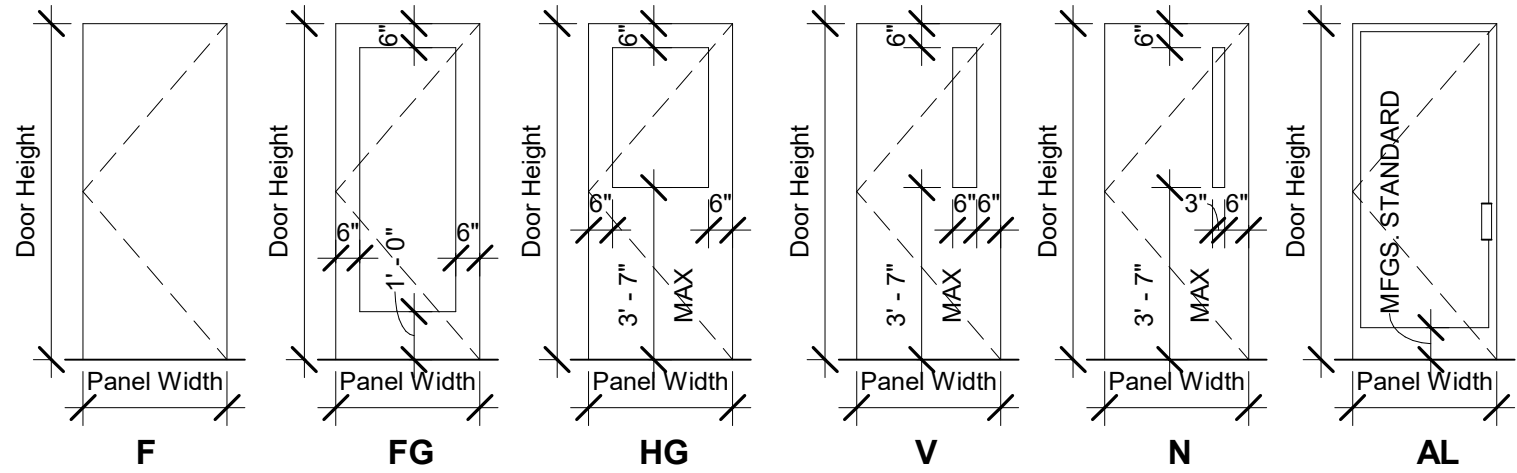


19 106 WOMEN'S RESTROOM_03
3/8" = 1'-0"

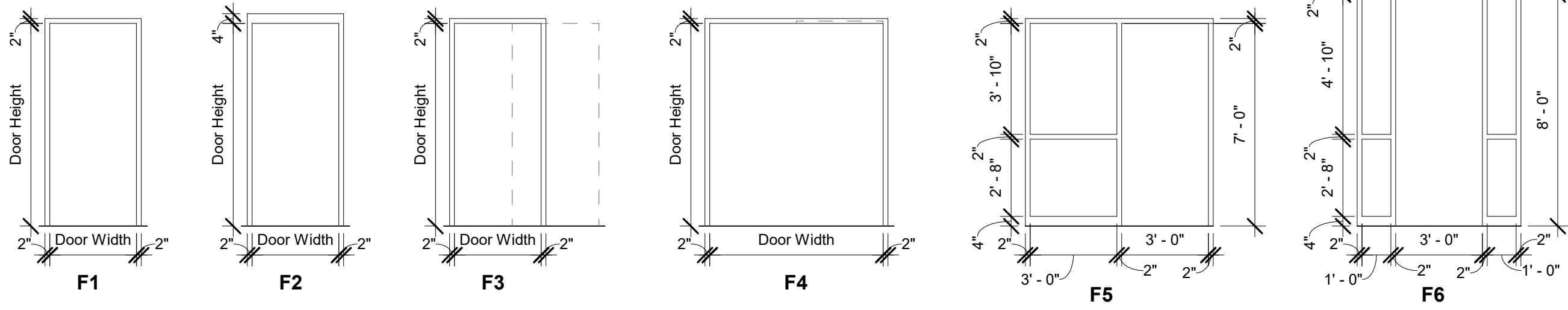




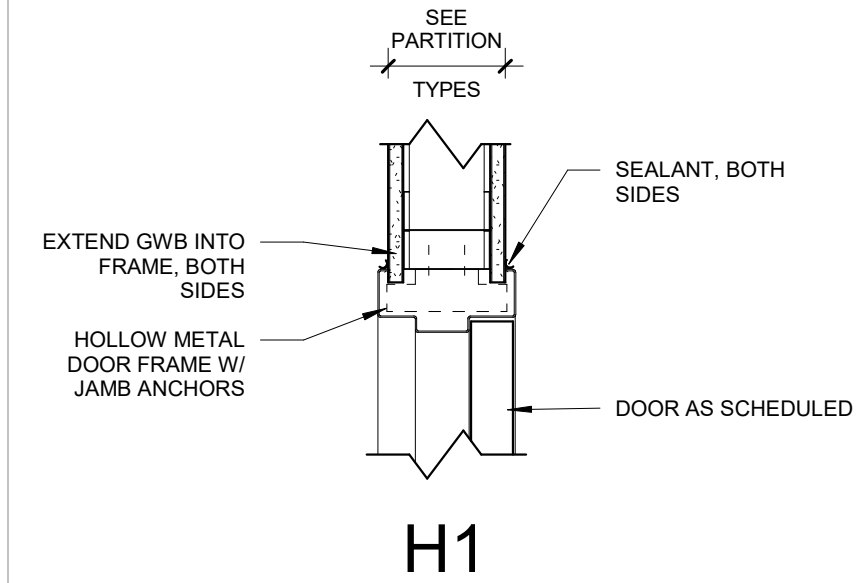
DOOR SCHEDULE																		
Mark	Sub	Single / Pair	Door Type	Overall Door Width	Door Panel 1 Width	Door Panel 2 Width	Door Height	Door Thickness	Door Undercut	Door Material	Door Finish	GLAZING		FRAME			Comments	
												Glazing Material	Glazing Thickness	Frame Type	Frame Material	Frame Finish		
00 - BASEMENT FLOOR PLAN																		
B103A	A	PAIR	V	6'-0"	3'-0"	3'-0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	1/4"	F1	HM	PAINT		
B103B	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	1/4"	F1	HM	PAINT		
B104	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	1/4"	F1	HM	PAINT		
B104A	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED			F1	HM	PAINT		
B104B	A	SINGLE	F	2'-4"	2'-4"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED			F1	HM	PAINT		
B106	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED			F1	HM	PAINT		
B107	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED			F1	HM	PAINT		
B109	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	1/4"	F1	HM	PAINT		
B111	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	1/4"	F1	HM	PAINT		
B112	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED			F1	HM	PAINT		
B114	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	1/4"	F1	HM	PAINT		
B115	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED	TEMP	1/4"	F1	HM	PAINT		
B116	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED	TEMP	1/4"	F1	HM	PAINT		
B117	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED	TEMP	1/4"	F1	HM	PAINT		
B117A	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED			F1	HM	PAINT		
B118	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED	TEMP	1/4"	F1	HM	PAINT		
B118B	A	SINGLE	F	2'-6"	2'-6"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED	TEMP	1/4"	F1	HM	PAINT		
B120	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	1/4"	F1	HM	PAINT		
E-8102	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	HM	PAINT			F1	HM	PAINT		
E-8105A	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	HM	PAINT			F1	HM	PAINT		
01 - FIRST FLOOR																		
101	102	PAIR	AL	6'-0"	3'-0"	3'-0"	8'-0"	1 3/4"		AL		temp	temp	1/4"	AL			
104A	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED			F1	HM	PAINT		
104B	A	SINGLE	F	4'-0"			7'-0"	1 3/4"	0"					F1	HM	PAINT	CASED OPENING	
105	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED			F1	HM	PAINT		
106	A	SINGLE	F	4'-0"			7'-0"	1 3/4"	0"					F1	HM	PAINT	CASED OPENING	
107	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED			F1	HM	PAINT		
108	A	PAIR	V	6'-0"	3'-0"	3'-0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	3/4"	F1	HM	PAINT		
109	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	1/4"	F5	HM	PAINT		
110	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	1/4"	F5	HM	PAINT		
110A	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED			F1	HM	PAINT		
110B	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED			F1	HM	PAINT		
111	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED	TEMP	1/4"	F5	HM	PAINT		
111A	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED			F1	HM	PAINT		
111B	SINGLE	V	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	1/4"	F5	HM	PAINT		
112	SINGLE	V	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	1/4"	F5	HM	PAINT		
113	SINGLE	V	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED	TEMP	1/4"	F5	HM	PAINT		
113A	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	1/2"	SCW	STAINED			F1	HM	PAINT		
114A	PAIR	F	F	6'-0"	3'-0"	3'-0"	8'-0"	1 3/4"	0"	SCW	STAINED			F1	HM	PAINT		
114B	A	PAIR	F	6'-0"	3'-0"	3'-0"	8'-0"	1 3/4"	0"	SCW	STAINED			F1	HM	PAINT		
115A	PAIR	F	F	6'-0"	3'-0"	3'-0"	8'-0"	1 3/4"	0"	SCW	STAINED			F1	HM	PAINT		
115B	A	PAIR	F	6'-0"	3'-0"	3'-0"	8'-0"	1 3/4"	0"	SCW	STAINED			F1	HM	PAINT		
119	A	PAIR	F	6'-0"	3'-0"	3'-0"	8'-0"	1 3/4"	0"	SCW	STAINED			F1	HM	PAINT		
120B	A	SINGLE	V	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	SCW	STAINED			F1	HM	PAINT		
122	SINGLE	FG	FG	3'-0"	3'-0"	0"	8'-0"	1 3/4"		SCW	STAINED	TEMP	1/4"	F6	HM	PAINT		
E-101	PAIR	AL	AL	6'-0"	3'-0"	3'-0"	8'-0"	1 3/4"		AL		temp	temp	1/4"	AL			
E-102	PAIR	AL	AL	6'-0"	3'-0"	3'-0"	8'-0"	1 3/4"		AL		temp	temp	1/4"	AL			
E-115	A	SINGLE	F	3'-0"	3'-0"	0"	7'-0"	1 3/4"	0"	HM	PAINT			F1	HM	PAINT		



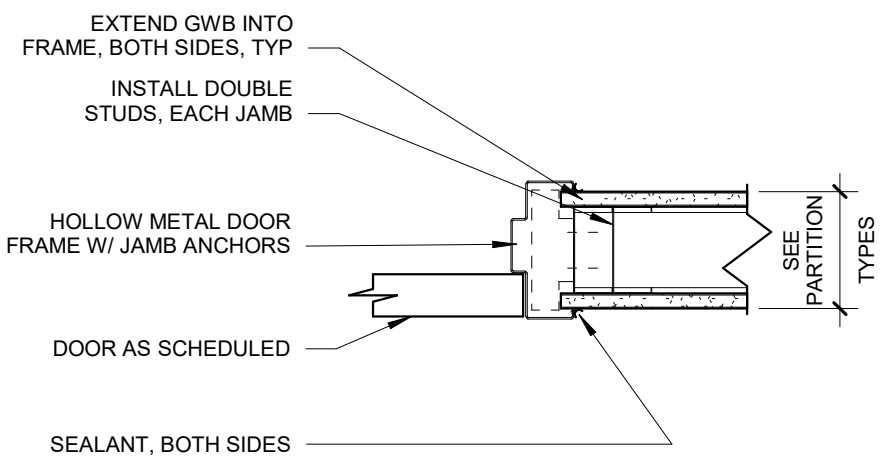
1 DOOR TYPES
1/4" = 1'-0"



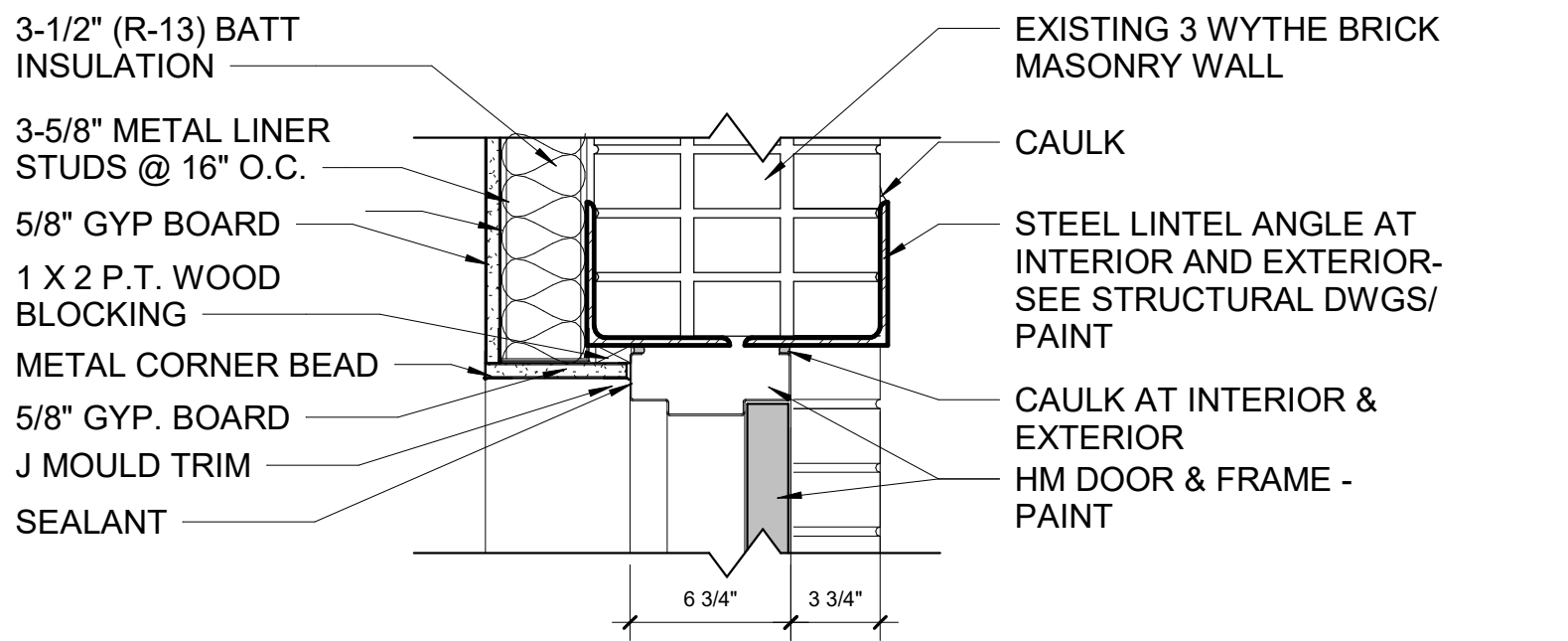
2 HOLLOW METAL FRAME TYPES
1/4" = 1'-0"



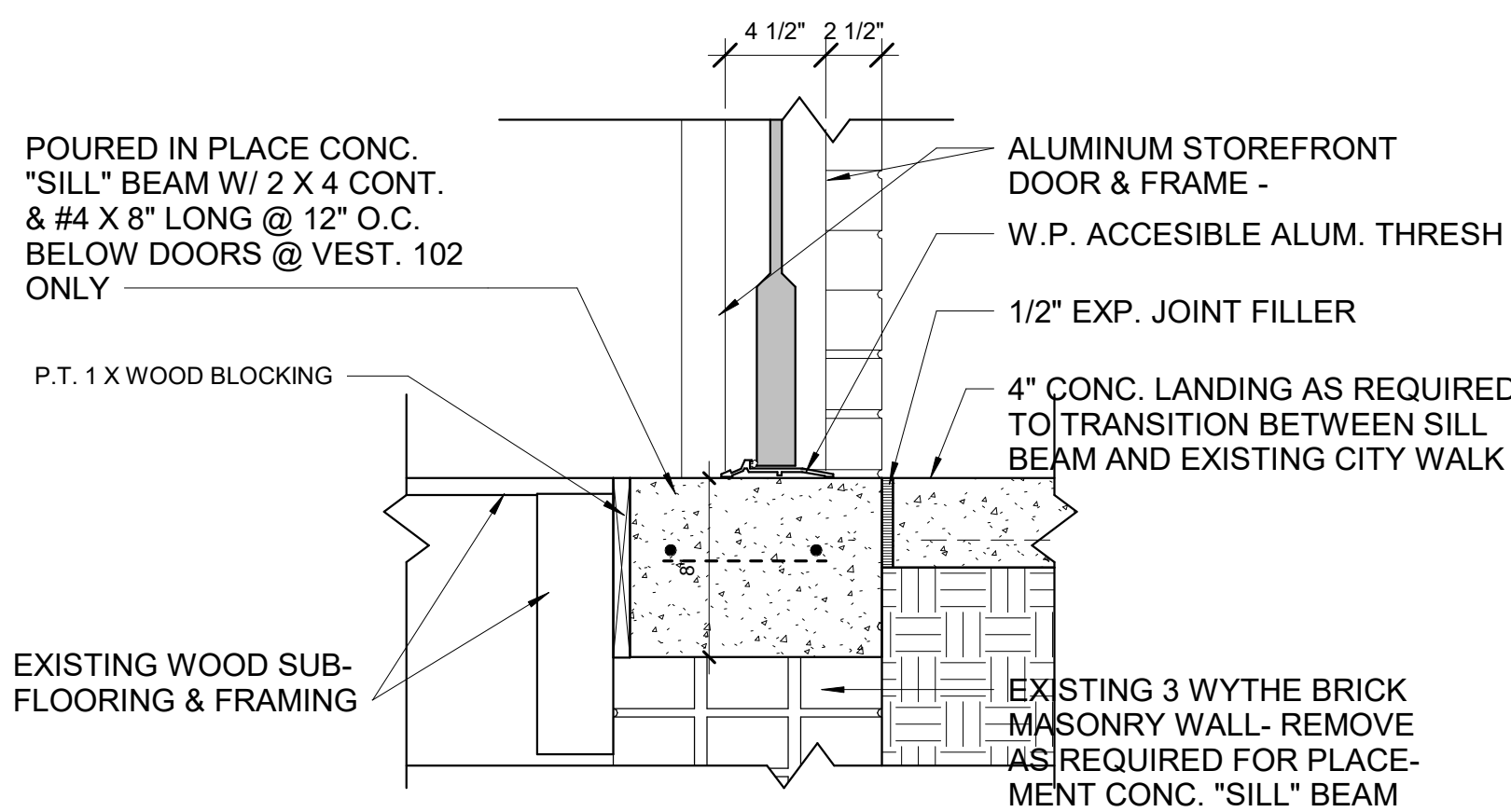
3 INTERIOR DOOR HEAD DTL
1 1/2" = 1'-0"



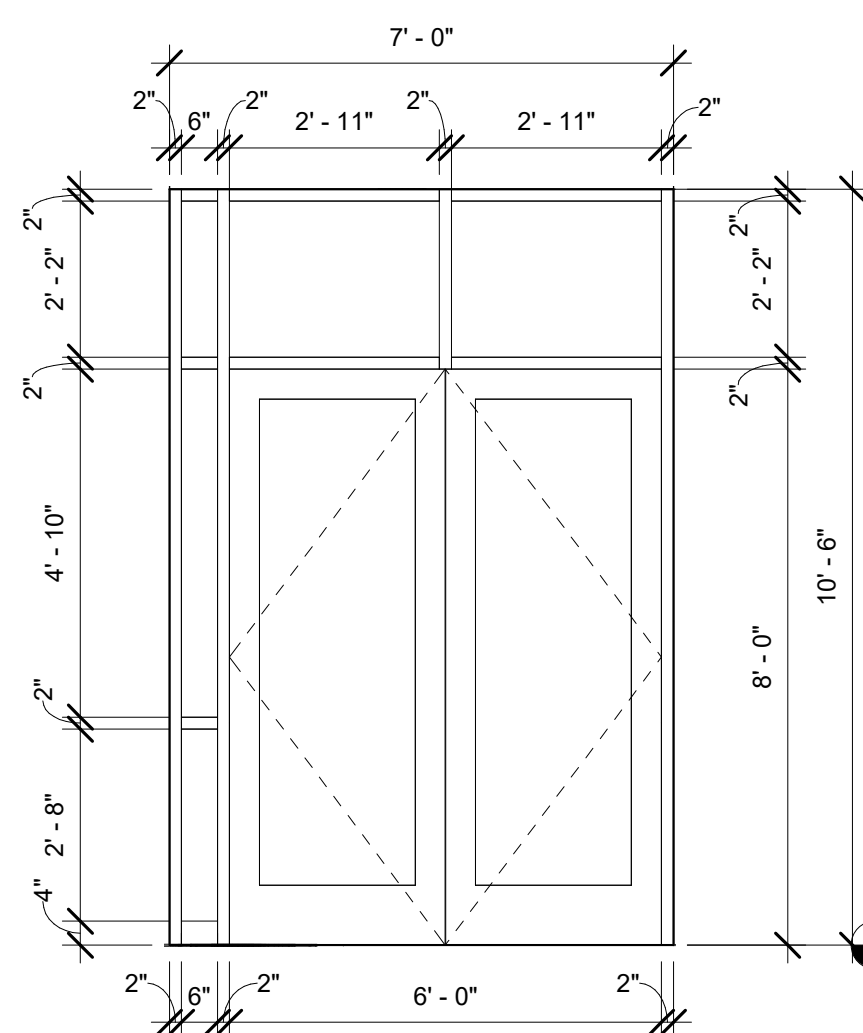
4 INTERIOR DOOR JAMB DTL
1 1/2" = 1'-0"



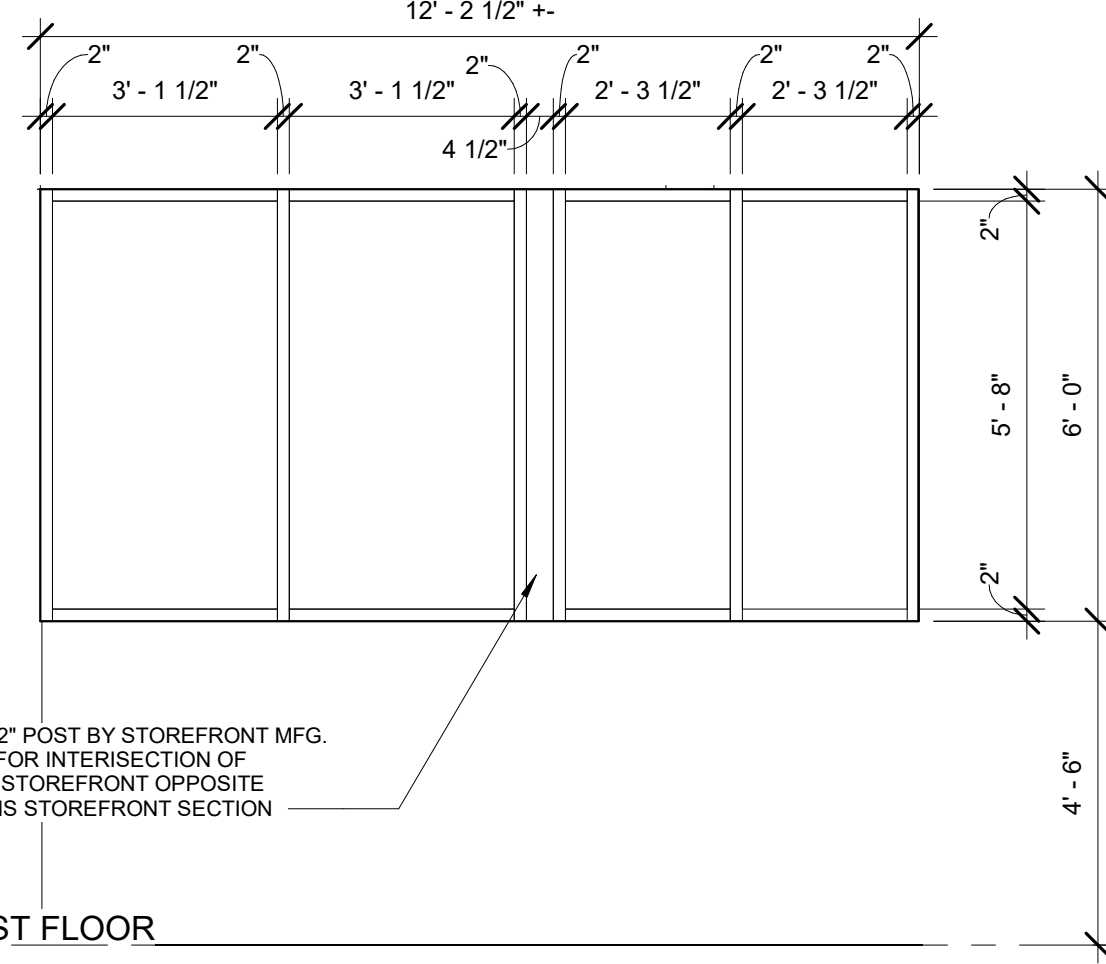
5 EXTERIOR EXISTING MASONRY DOOR FRAMING DTLS
1 1/2" = 1'-0"



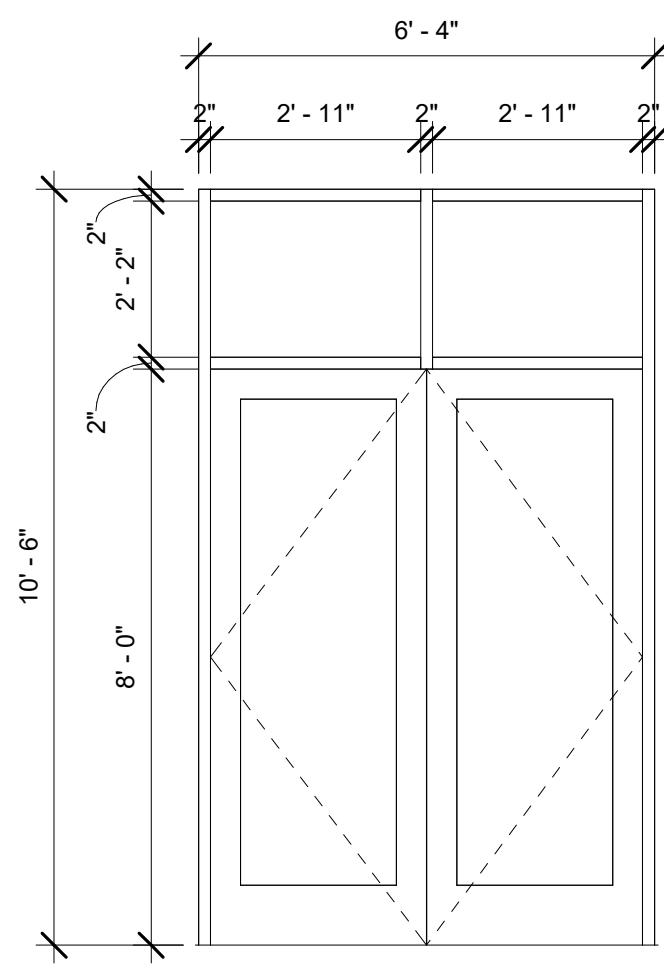
6 STOREFRONT ELEVATION SF1
3/8" = 1'-0"



7 STOREFRONT ELEVATION SF2
3/8" = 1'-0"



8 STOREFRONT ELEVATION SF3
3/8" = 1'-0"



9 STOREFRONT ELEVATION SF4
3/8" = 1'-0"

INTERIOR ALUMINUM STOREFRONT ELEVATIONS

NOTE: SEE EXTERIOR ELEVATIONS SHEET A3.00 FOR EXTERIOR ALUMINUM STOREFRONT ELEVATIONS

FINISH LEGEND									
CATEGORY	FINISH	DESCRIPTION	MANUFACTURER	CONTACT INFO	COLLECTION	PATTERN	SIZE	COLOR	MATERIAL COMMENTS
1-FLOOR									
1-FLOOR	CPT-1	CARPET TILE	TBD	-	-	-	-	-	MATERIAL COST \$16 SQYD
1-FLOOR	CPT-2	CARPET TILE	TBD	-	-	-	-	-	MATERIAL COST \$27 SQYD
1-FLOOR	CPT-3	CARPET TILE	TBD	-	-	-	-	-	MATERIAL COST \$33 SQYD
1-FLOOR	CPT-4	WALK-OFF CARPET	TBD	-	-	-	-	-	MATERIAL COST \$35 SQYD
1-FLOOR	LVT	LUXURY VINYLE TILE	TBD	-	-	-	-	-	MATERIAL COST \$3.50 SQFT
1-FLOOR	PC	POLISHED CONCRETE	TBD	-	-	-	-	-	-
1-FLOOR	T-1	TILE	TBD	-	-	-	-	-	MATERIAL COST \$5.00 SQFT
2-BASE									
2-BASE	RB	4" RUBBER BASE	-	-	-	-	-	-	4" CONTINUOUS ROLL RUBBER
2-BASE	TB-1	TILE BASE	-	-	-	-	-	-	MATERIAL COST \$5.00 SQFT
3-WALL									
3-WALL	AP	ACOUSTIC PANEL	-	-	-	-	-	-	-
3-WALL	EXP-T	EXTERIOR PAINT	-	-	-	-	-	-	-
3-WALL	FRR	FIBER-REINFORCED PLASTIC LAMINATE	-	-	-	-	-	-	-
3-WALL	PT-1	PAINT	-	-	-	-	-	WHITE	-
3-WALL	PT-2	PAINT	TBD	-	-	-	-	LIGHT GRAY	-
3-WALL	PT-3	PAINT	TBD	-	-	-	-	DARK GRAY	-
3-WALL	PT-4	PAINT	TBD	-	-	-	-	GRAPHIC	-
3-WALL	PT-5	PAINT	TBD	-	-	-	-	GRAPHIC	-
3-WALL	PT-6	PAINT	TBD	-	-	-	-	GRAPHIC	-
3-WALL	PT-7	PAINT	TBD	-	-	-	-	GRAPHIC	-
3-WALL	WT-1	WALL TILE	TBD	-	-	-	-	-	MATERIAL COST \$5.00 SQFT
3-WALL	WT-2	WALL TILE	TBD	-	-	-	-	-	MATERIAL COST \$6.50 SQFT
4-Ceilings									
4-Ceilings	ACT	ACOUSTIC CEILING TILE	ARMSTRONG	-	-	-	-	24" x 24" x 9/16"	SEE RCP
4-Ceilings	EXP-1	EXPOSED CEILINGS - PAINTED	-	-	-	-	-	-	-
4-Ceilings	EXP-2	EXPOSED UNPAINTED	-	-	-	-	-	-	-
4-Ceilings	GYP	GYPSUM CEILING	-	-	-	-	-	-	SEE RCP
5-MILLWORK									
5-MILLWORK	PL-1	PLAM	TBD	-	-	-	-	-	PRICE AS STANDARD DESIGN
5-MILLWORK	PL-2	PLAM	TBD	-	-	-	-	-	PRICE AS STANDARD DESIGN
5-MILLWORK	QZ	QUARTZ	TBD	-	-	-	-	-	PRICE GROUP A
5-MILLWORK	WD-C	WOOD CABINETS	-	-	-	-	-	WD-S	-
6-MISC									
6-MISC	CG	CORNER GUARDS	-	-	-	-	-	-	-
6-MISC	ST-1	WALL TILE TRANSITIONS	SCHLUTER SYSTEMS	-	-	-	-	COVE SHAPE PROFILE	PROFILE FOR THIN TILE
6-MISC	ST-2	WALL TILE TRANSITIONS	SCHLUTER SYSTEMS	-	-	-	-	-	PROFILE FOR THIN TILE
6-MISC	TH-1	TILE THRESHOLD	-	-	-	-	-	-	GROUT COLOR:
6-MISC	TP	TOILET PARTITION	-	-	-	-	-	-	-
6-MISC	WD-S	WOOD STAIN	-	-	-	-	-	-	-

FINISH LEGEND GENERAL NOTES:

- 1
- SUBSTITUTIONS OF FINISH PRODUCTS WILL NOT BE ALLOWED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.
- 2
- NOTIFY ARCHITECT OF ANY CONFLICT BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS WHERE RELATED TO FINISHES.
- 3
- PRE-INSTALLATION CONFERENCE REQUIRED FOR REVIEW OF ALL FLOORING.
- 4
- LOCATE ALL TRANSITION STRIPS, THRESHOLDS AND RUBBER STRIPS IN THE CENTERLINE OF THE DOOR WHEN CLOSED, UNLESS OTHERWISE SPECIFIED.
- 5
- SCHLUTER FLOORING TRANSITIONS TO BE SATIN ANODIZED ALUMINUM
- 6
- ALL RUBBER TRANSITION STRIPS TO MATCH RUBBER BASE; COLOR TBD.
- 7
- ALL RUBBER BASE TO BE CONTINUOUS ROLL. NO SEGMENTED BASE ALLOWED.
- 8
- LOCATE THRESHOLDS IN THE CENTERLINE OF THE DOOR WHEN CLOSED, UNLESS OTHERWISE SPECIFIED.
(a) SEE FLOOR PATTERN PLAN SHEETS FOR LOCATIONS.
- 9
- REQUIRED FINISH OF PAINTED SURFACE, UNLESS NOTED OTHERWISE (SEE COMMENTS ON FINISH SCHEDULE):
WALLS - EGGSHELL
TRIM/DOORS/ETC. - SEMI-GLOSS
CEILINGS/SOFFITS - FLAT
- 10
- PROVIDE 4'X4' MOCK-UP OF EACH PAINT COLOR FOR APPROVAL BY OWNER AND DESIGNER.
- 11
- PAINT DOOR FRAMES TO MATCH ADJACENT WALL UNLESS NOTED OTHERWISE.
(a) SEE WALL ACCENT PLAN SHEETS FOR LOCATIONS.
- 12
- PAINT MISC. METAL ITEMS (RETURN AIR GRILLS, LOUVERS, ETC.) ADJACENT WALL OR CEILING COLOR.CONTACT ARCHITECT FOR CLARIFICATION WHEN REQUIRED.
- 13
- ALL EXPOSED INTERIOR STEEL, EXCEPT FOR COLUMNS, & EXPOSED HVAC DUCTS TO BE PAINTED WITH A FLAT FINISH, UNLESS OTHERWISE NOTED; ALL EXPOSED INTERIOR STEEL COLUMNS TO BE PAINTED ADJACENT WALL FINISH.
(a) PAINT EXPOSED INTERIOR STEEL COLUMNS PT-TBD
(b) PAINT EXPOSED STEEL FOR STAIRS & RAILING PT-TBD
(c) PAINT EXPOSED INTERIOR STEEL, EXCEPT FOR COLUMNS, STAIRS, & RAILING, PT-TBD
(d) PAINT EXPOSED HVAC DUCTS PT-TBD
- 14
- PAINT EXPOSED CEILINGS, DUCT WORK, EXPOSED METAL DECKING, STRUCTURE, MISC. METALS, PIPING, CONDUIT, UTILITIES, ETC. TO BE PAINTED FLAT FINISH; PAINT PT-TBD.
- 15
- WOOD DOORS TO BE WHITE MAPLE WOOD.
(a) DOORS TO BE MANUFACTURE STAIN COLOR TBD, OR APPROVED EQUAL.
- 16
- ALL GYP. IN WET LOCATIONS TO BE MOISTURE RESISTANT.
- 17
- ALL TOILET ACCESSORIES TO BE STAINLESS STEEL WITH A SATIN FINISH, UNLESS OTHERWISE NOTED.

FINISH SCHEDULE								
ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	MILLWORK	CEILING FINISH	COMMENTS	ROOM NUMBER
00 - BASEMENT FLOOR PLAN								
B102	LOBBY	LVT	RB	PT		EXP		B102
B103	CLASSROOM	CPT-2	RB	PT, AP		EXP		B103
B104	STO. / RESOURCE ROOM	SC	RB	PT		EXP		B104
B104A	MECHANICAL SPRINKLER	SC	RB	PT		EXP		B104A
B104B	MECH	SC	RB	PT		EXP		B104B
B105	CORRIDOR	LVT	RB	PT		EXP		B105
B106	MEN	T-1	TB	PT, WT		ACT		B106
B107	WOMEN	T-1	TB	PT, WT		ACT		B107
B108	CORRIDOR	LVT	RB	PT		EXP		B108
B109	VEST.	CPT-3	RB	PT		EXP		B109
B110	GREEN ROOM	CPT-3	RB	PT	COUNTERTOP: QZ, CABINETS: PL	EXP		B110
B111	R.E.	T-1	TB	PT, WT		ACT		B111
B112	ELEC / DATA / IT	SC	RB	PT		EXP		B112
B113	ELEV.	LVT	-	-		-		B113
B114	CORRIDOR	LVT	RB	PT		EXP		B114
B115	OFFICE	CPT-1	RB	PT		EXP		B115
B116	OFFICE	CPT-1	RB	PT		EXP		B116
B117	OFFICE	CPT-1	RB	PT		EXP		B117
B117A	STO.	CPT-1	RB	PT		EXP		B117A
B118	COPY / PRINT / FAX	LVT	RB	PT		EXP		B118
B118B	MECH	SC	RB	PT		EXP		B118B
B119	OPEN OFFICE	LVT	RB	PT		EXP		B119
B120	VOLUNTEERS	LVT	RB	PT	COUNTERTOP: PL, CABINETS: PL	EXP		B120
01 - FIRST FLOOR								
101	VEST.	CPT-4	RB	PT		GYP		101
102	VEST.	CPT-4	RB	PT		GYP		102
103	COMMONS / CAFE	LVT, CPT-3	RB	PT	COUNTERTOP: QZ, CABINETS: PL	EXP		103
104	MENS RR	T-1	TB	PT, WT	COUNTERTOP: QZ, CABINETS: PL	GYP		104
104A	UTILITY	LVT	RB	PT		EXP		104A
105	ASSIST. RR	T-1	TB	PT, WT	COUNTERTOP: QZ, CABINETS: PL	GYP		105
106	WOMENS RR	T-1	TB	PT, WT	COUNTERTOP: QZ, CABINETS: PL	GYP		106
107	NURSING MOTHERS	CPT-1	RB	PT		ACT		107
108	CORRIDOR	CPT-2	RB	PT		ACT		108
109	NURSERY	CPT-2	RB	PT	COUNTERTOP: PL, CABINETS: PL	ACT		109
110	TODDLER	CPT-2	RB	PT	COUNTERTOP: PL, CABINETS: PL	ACT		110
110A	RR	T-1	TB	PT, WT		GYP		110A
111	1ST - 5TH	CPT-2	RB	PT	COUNTERTOP: PL, CABINETS: PL	ACT		111
111A	RR	T-1	TB	PT, WT		GYP		111A
112	PRESCHOOL	CPT-2	RB	PT	COUNTERTOP: PL, CABINETS: PL	ACT		112
113	4 YRS - K	CPT-2	RB	PT	COUNTERTOP: PL, CABINETS: PL	ACT		113
113A	RR	T-1	TB	PT, WT		GYP		113A
114	SOUND / LIGHT LOCK	CPT-2	RB	PT		ACT		114
115	WORSHIP	CPT-1	RB	PT, AP		EXP		115
116	PLATFORM	CPT-1	RB	PT		EXP		116
119	STORAGE	CPT-1	RB	PT		EXP		119
120	CONTROL BOOTH	CPT-1	RB	PT	COUNTERTOP: PL	EXP		120
120B	CONTROL ROOM	CPT-1	RB	PT	COUNTERTOP: PL	ACT		120B
121	ELEV.	-	-	-		-		121
122	STAIR	LVT	RB	PT		EXP		122

FINISH SCHEDULE COMMENTS LEGEND:

- (A)
- INSTALL TILE FLOORING IN A 33% MAX. OFFSET RUNNING BOND PATTERN. SEE ENLARGED FLOOR PATTERN PLANS FOR LAYOUT.
- (B)
- INSTALL TILE FLOORING IN A SQUARE GRID PATTERN. SEE ENLARGED FLOOR PATTERN PLANS FOR LAYOUT.
- (C)
- INSTALL LVT-TBD IN A HERRINGBONE PATTERN; CENTER PATTERN IN ROOM. SEE ENLARGED FLOOR PATTERN PLANS FOR LAYOUT.
- (D)
- INSTALL LVT-TBD IN A 33% MIN. TO 66% MAX. OFFSET RANDOM PYRAMID PATTERN. SEE ENLARGED FLOOR PATTERN PLANS FOR LAYOUT.
- (E)
- T-TBD TO BE LOCATED IN THE RESTROOM; LVT-TBD TO BE LOCATED IN ALL OTHER LOCATIONS.
- (F)
- RS-TBD ON ALL TREADS & LANDINGS.
- (G)
- SEE ACCENT WALL FLOOR PLANS FOR ACCENT WALL LOCATIONS.
- (H)
- SEE ACCENT WALL FLOOR PLANS FOR SPLIT DOOR FRAME PAINT NOTE.



Revisions
No. Description Date

LIFE Church, NY

Owner

275 Mamaroneck Ave.
Mamaroneck, NY 10543

Project Number

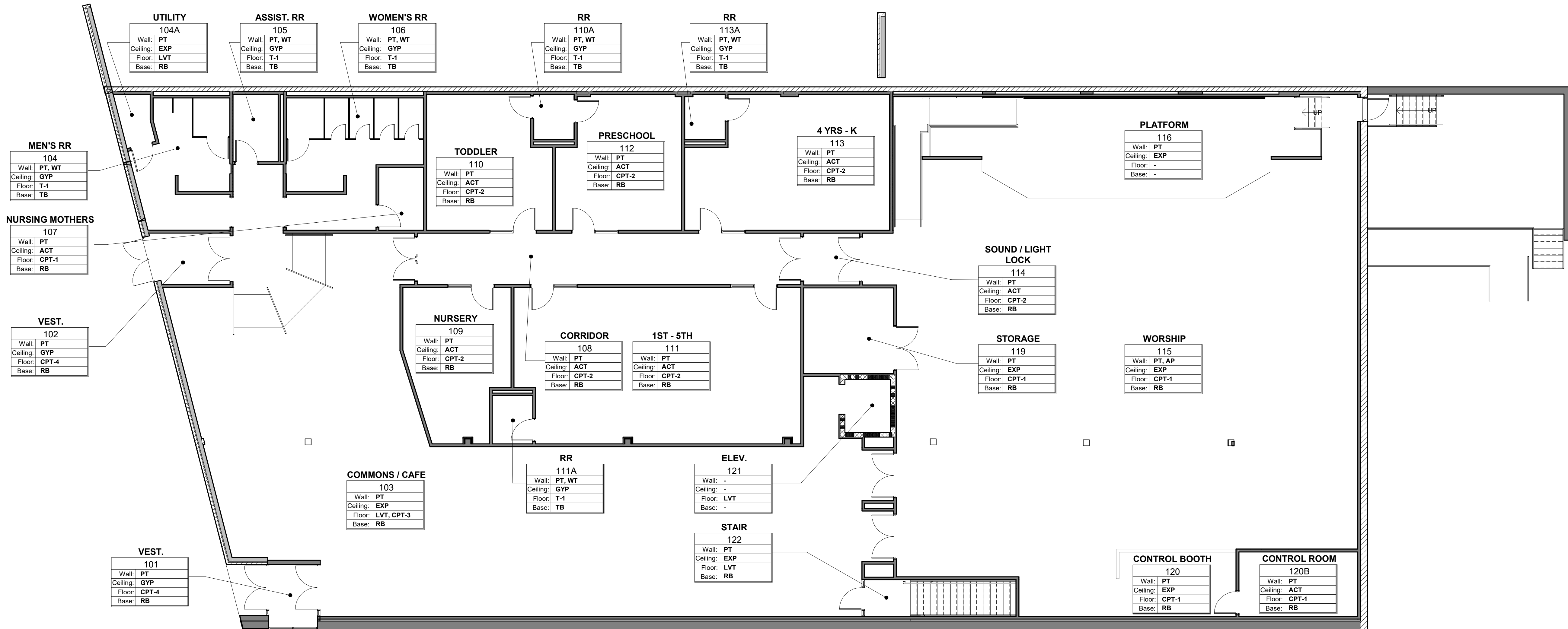
20007

Date

03.03.21

FINISH LEGEND
AND SCHEDULE

A7.00



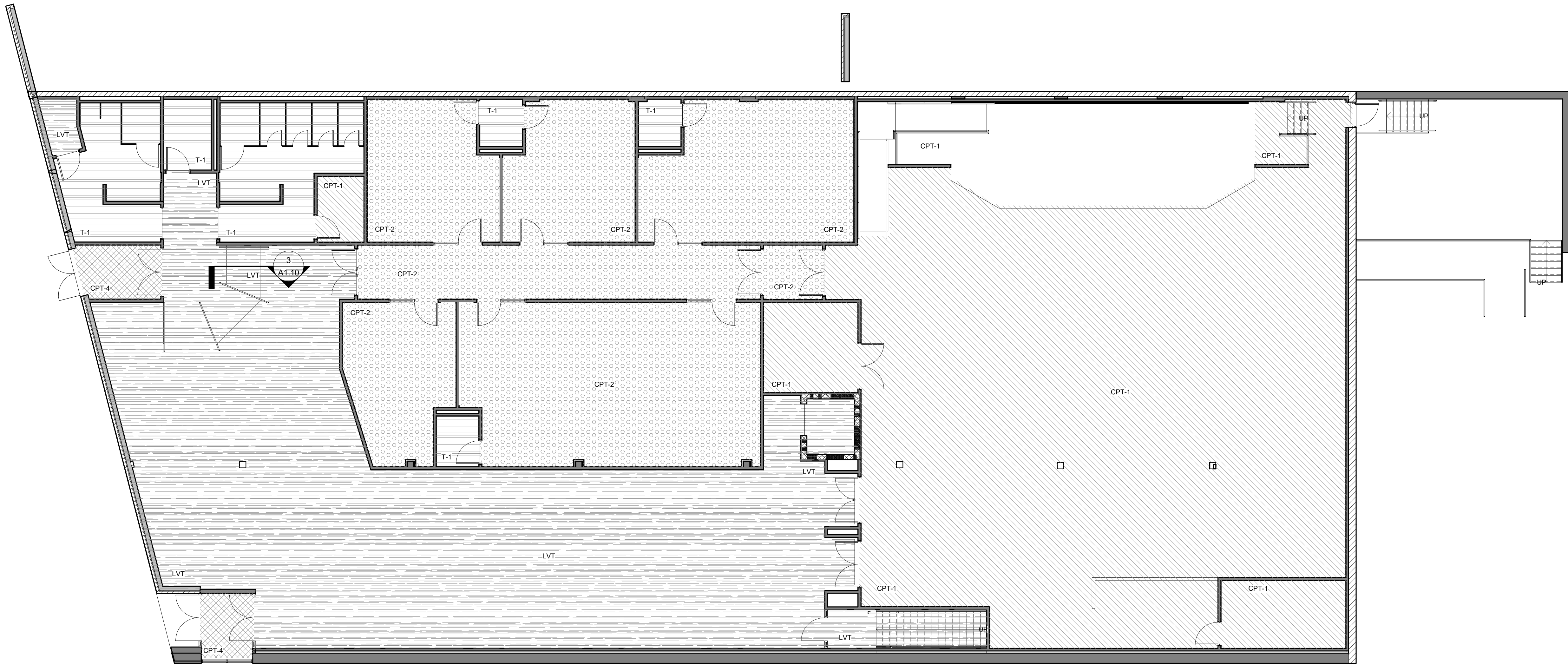
1 01 - FIRST FLOOR - FINISH PLAN
1/8" = 1'-0"



2 00 - BASEMENT FLOOR - FINISH PLAN
1/8" = 1'-0"

FINISH SCHEDULE GENERAL NOTES:

- SEE ENLARGED FLOOR PATTERN PLANS & FINISH SCHEDULE FOR LVT & TILE PATTERN LAYOUTS.
- SEE ACCENT WALL FLOOR PLANS FOR ACCENT WALL LOCATIONS.



**FLOOR FINISH
LEGEND:**

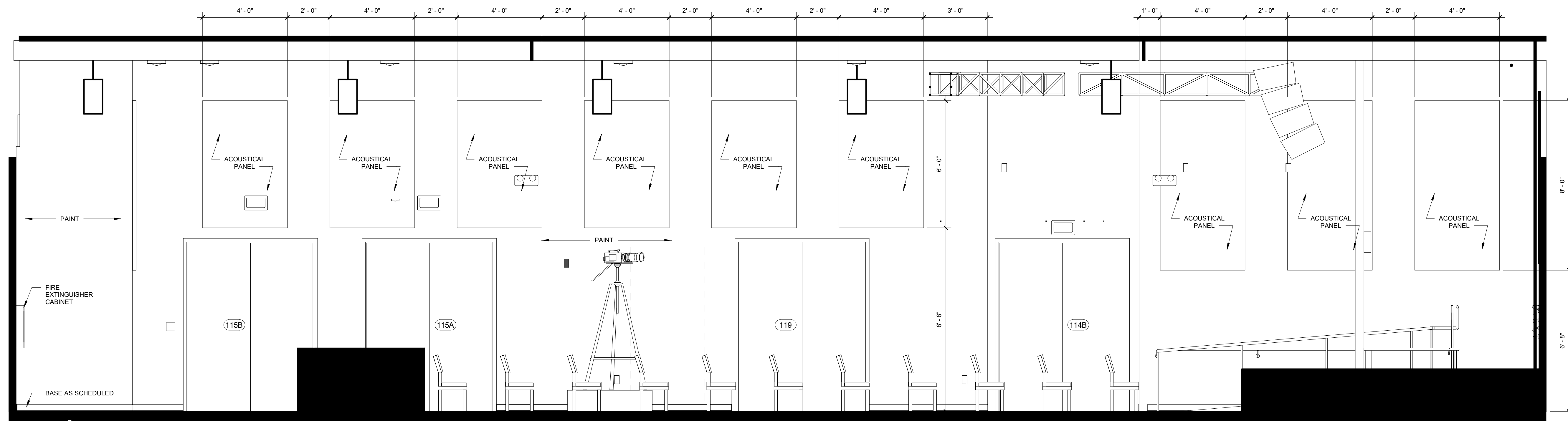
CPT-1	T-1
CPT-2	LVT
CPT-3	SC
CPT-4	

NOTE: HATCH PATTERNS ARE SPECIFIC PER SHEET. SEE FINISH SCHEDULE.

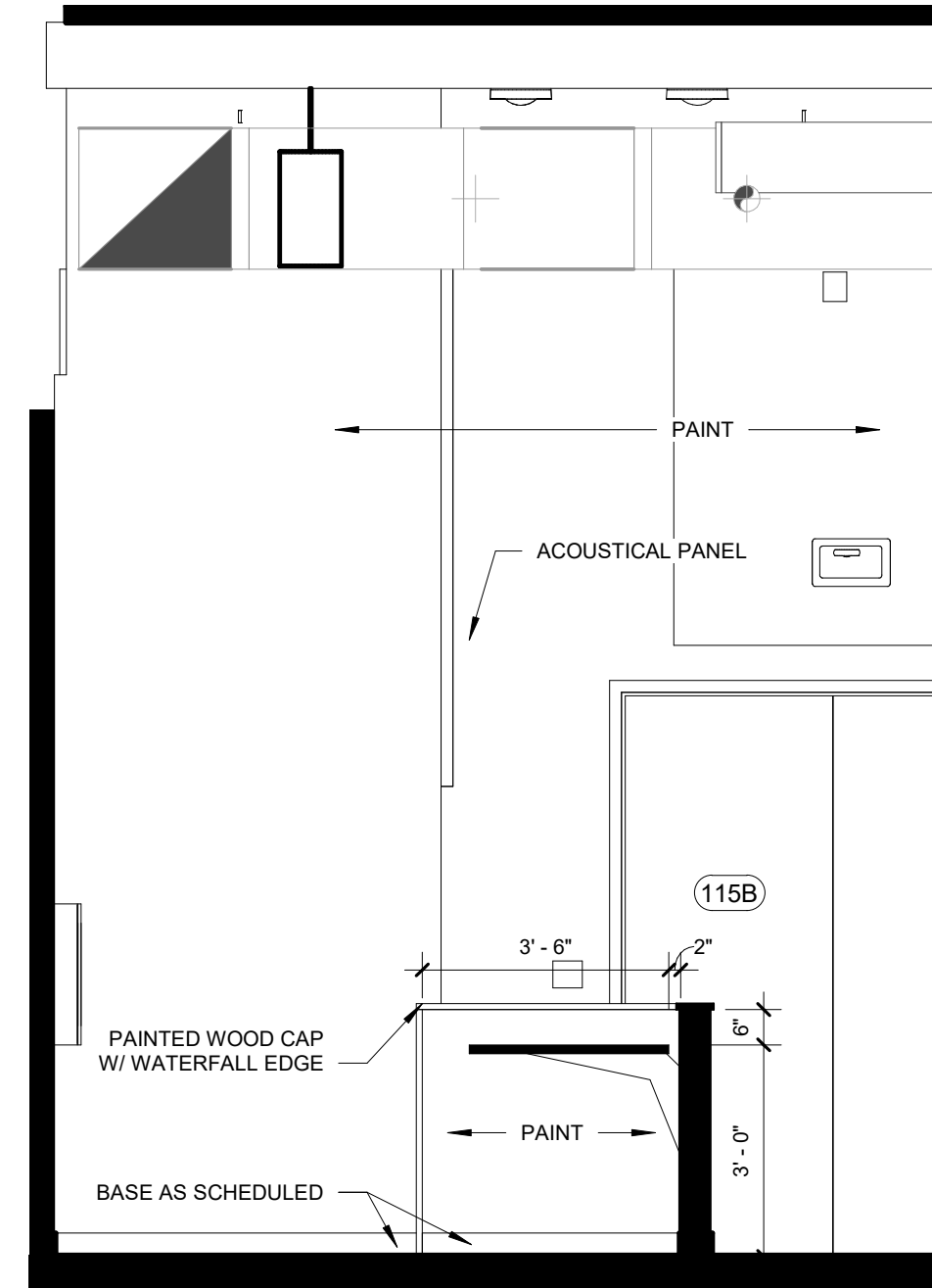
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1/8" = 1'-0"



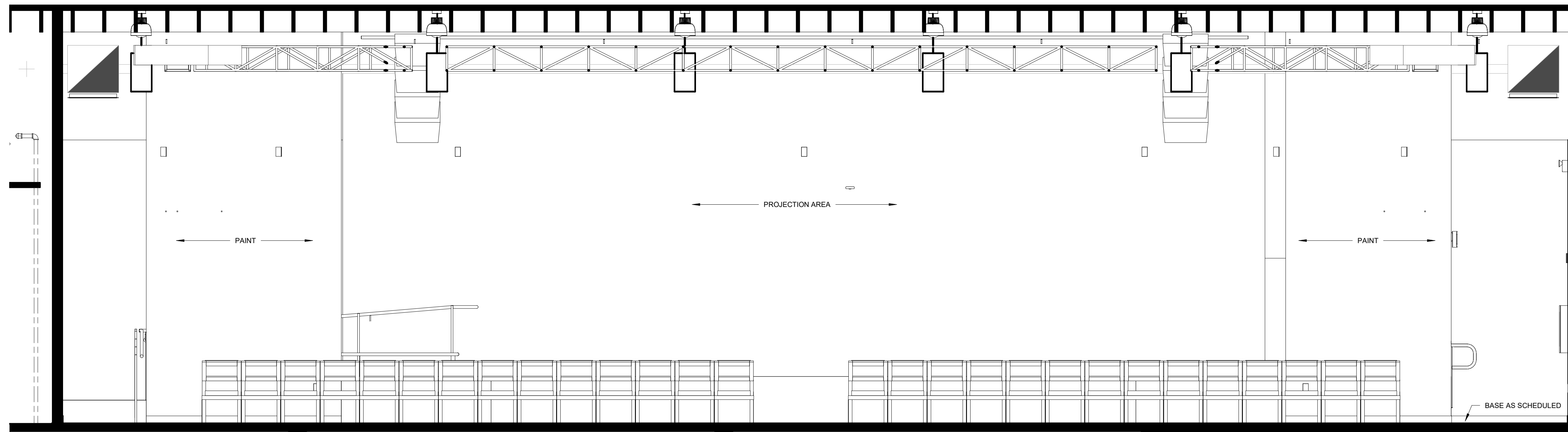
2 00 - BASEMENT FLOOR - FLOOR PATTERN PLAN
1/8" = 1'-0"



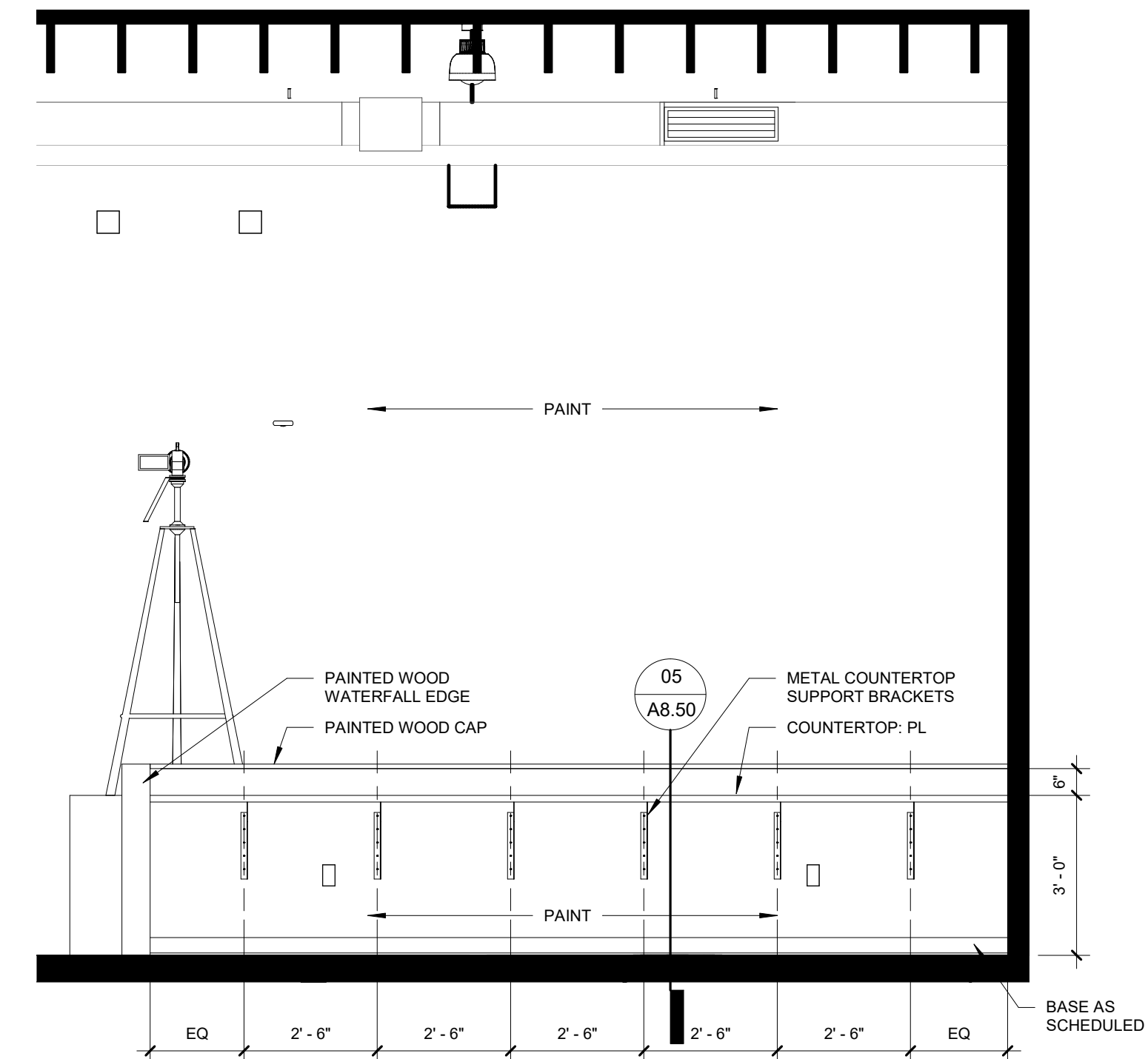
01 115_WORSHIP_01
3/8" = 1'-0"



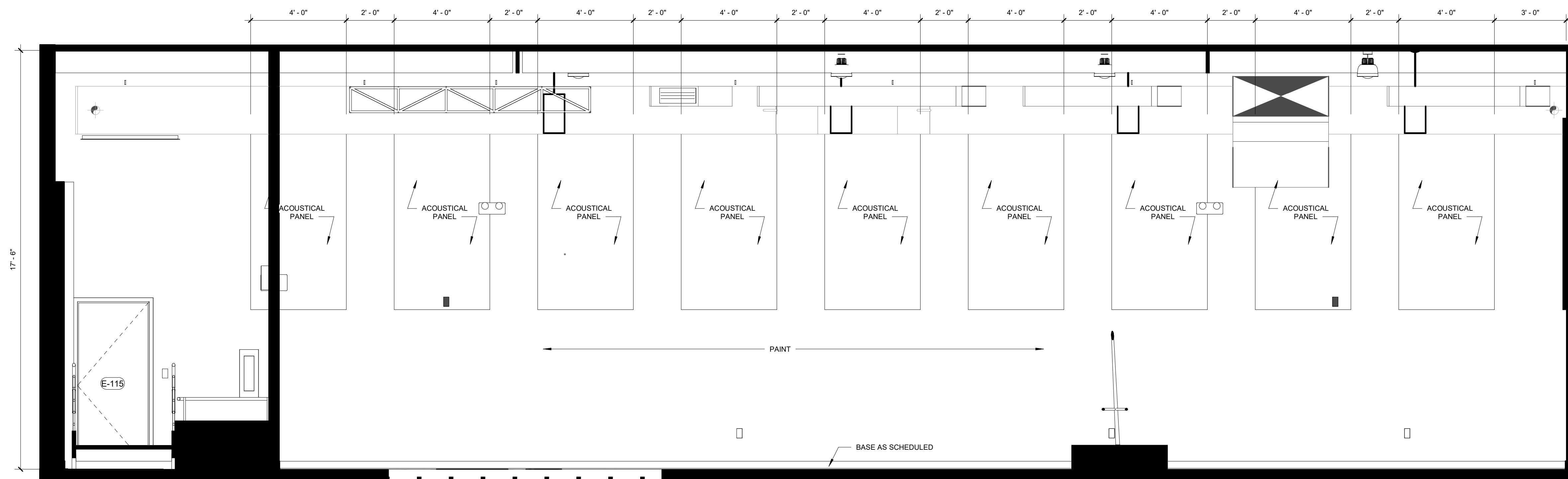
02 120_CONTROL BOOTH_02
3/8" = 1'-0"



03 115_WORSHIP_02
3/8" = 1'-0"



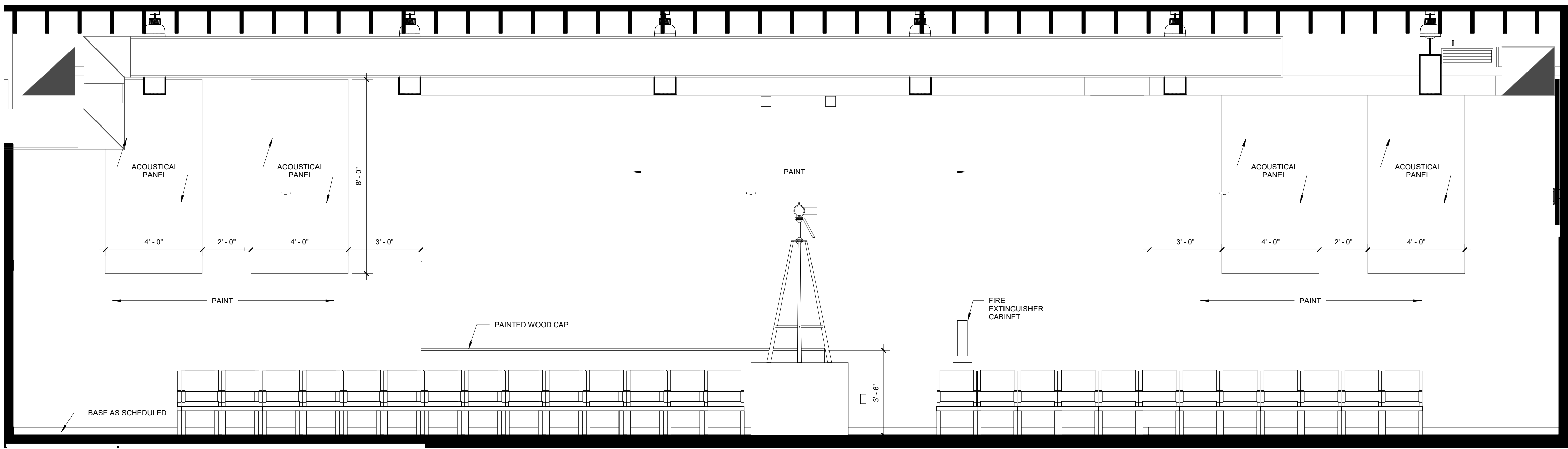
04 120_CONTROL BOOTH_01
3/8" = 1'-0"



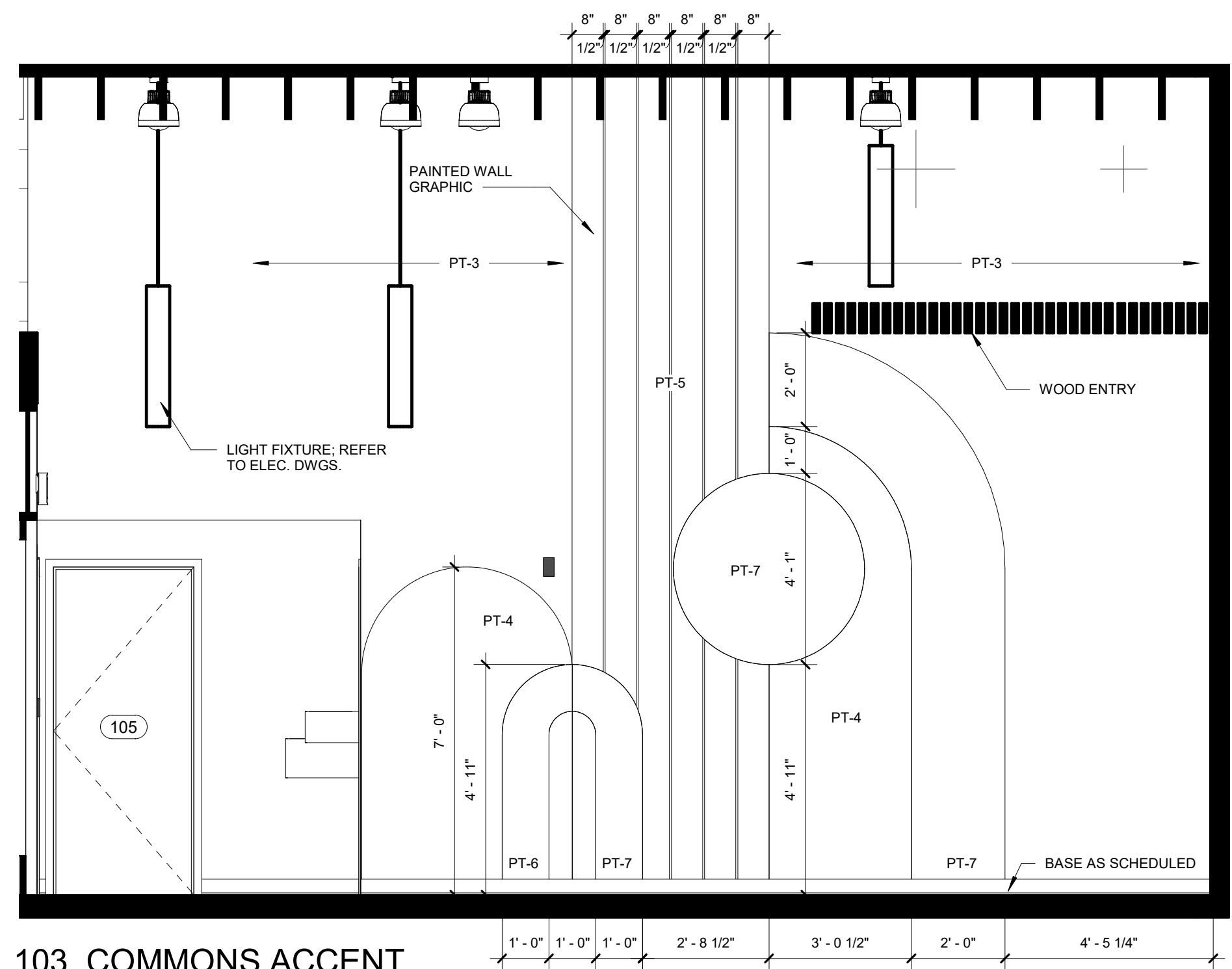
05 115_WORSHIP_03
3/8" = 1'-0"

INTERIOR ELEVATIONS GENERAL NOTES:

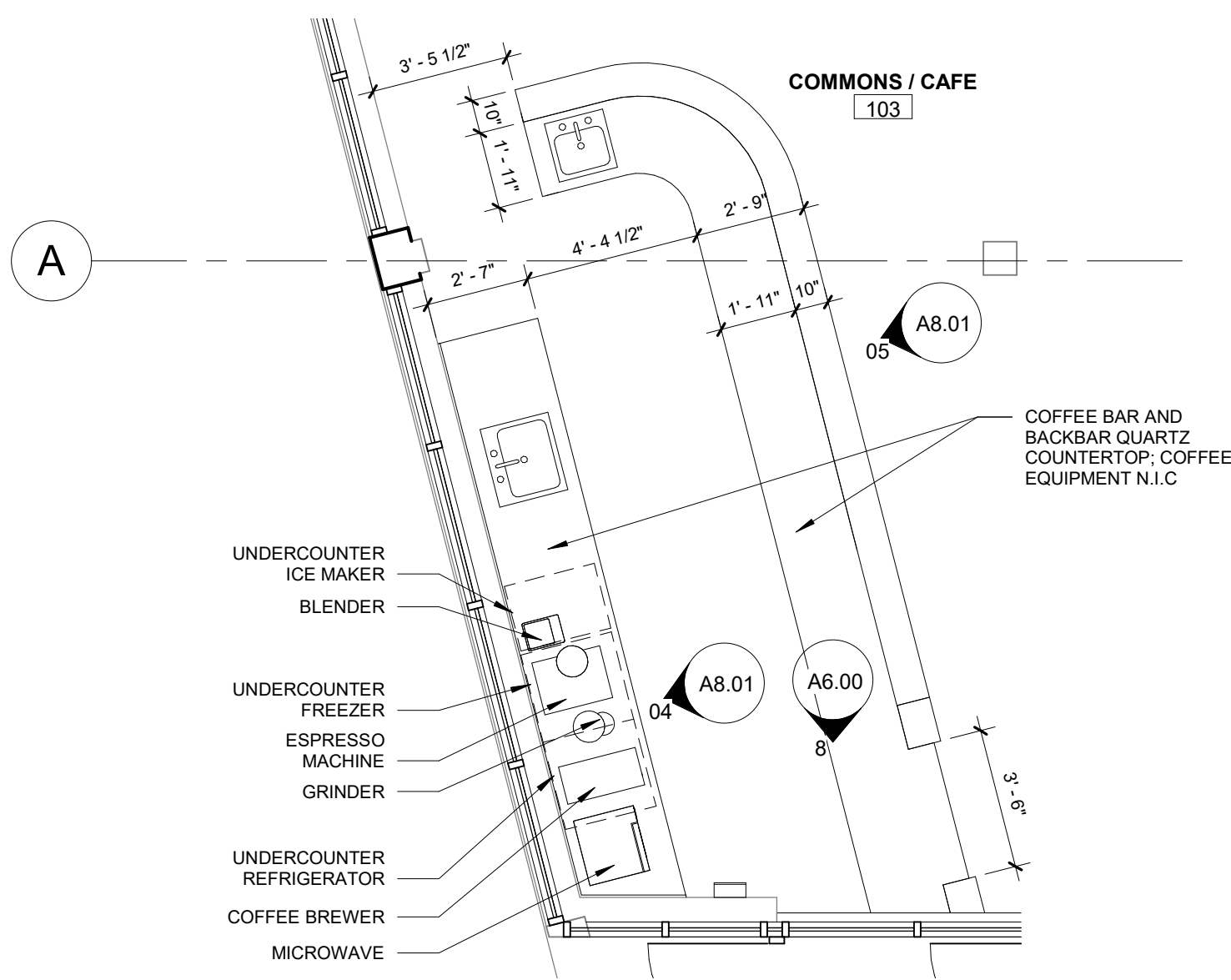
- 1) MATCH WALL TILE INSTALLATION AS SHOWN ON ELEVATIONS.
- 2) PROVIDE BLOCKING IN WALL FOR ALL TOILET ACCESSORIES & FUTURE TOILET ACCESSORIES.
- 3) PROVIDE BLOCKING IN WALL FOR METAL BRACKETS AS REQUIRED.
- 4) ALL TOILET ACCESSORIES TO BE STAINLESS STEEL WITH A SATIN FINISH, EXCEPT FOR TOILET ACCESSORIES IN SINGLE RESTROOMS IN APARTMENT UNITS, WHICH IS TO BE STAINLESS STEEL WITH A BRIGHT POLISH FINISH.



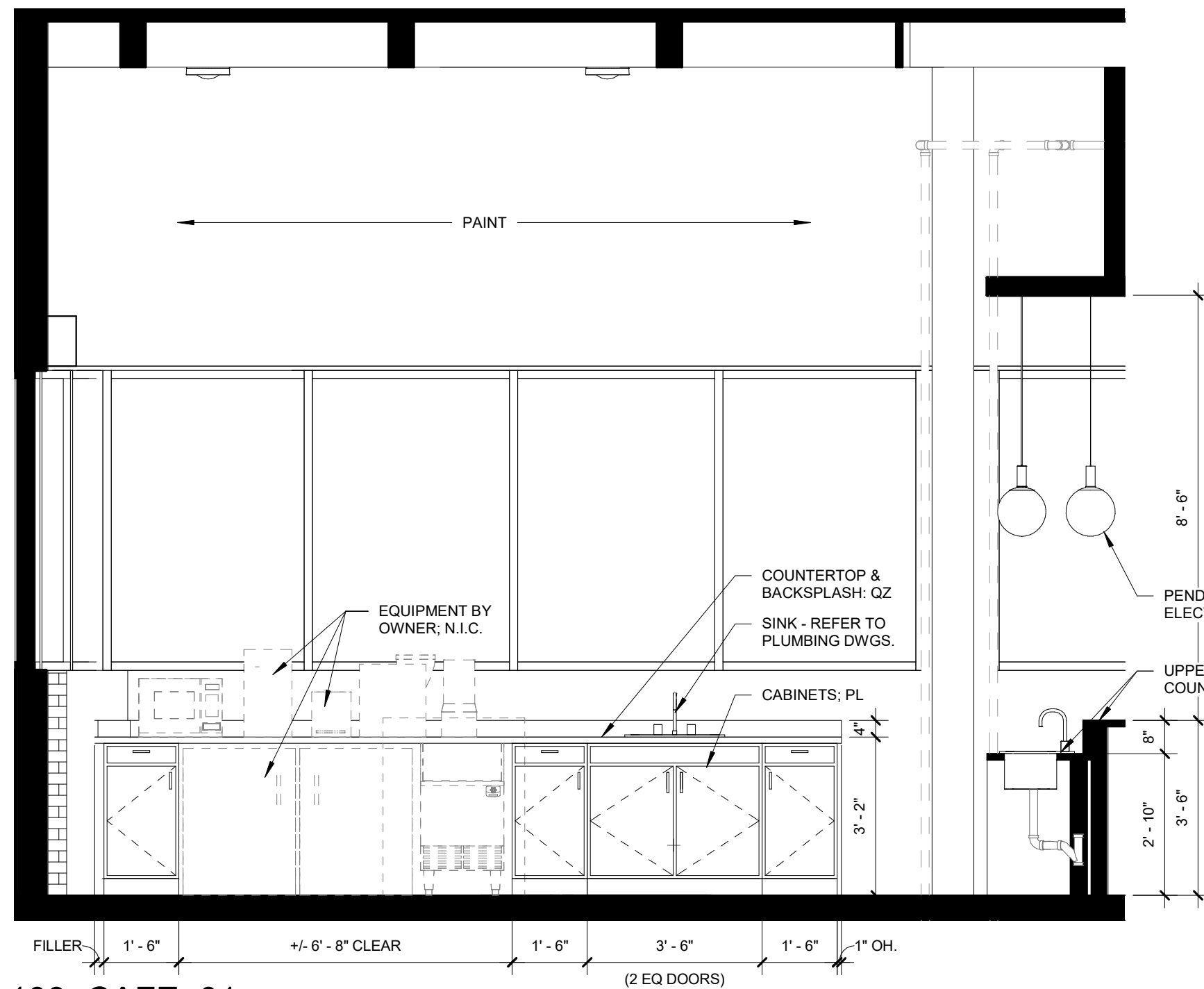
01 115_WORSHIP_04
3/8" = 1'-0"



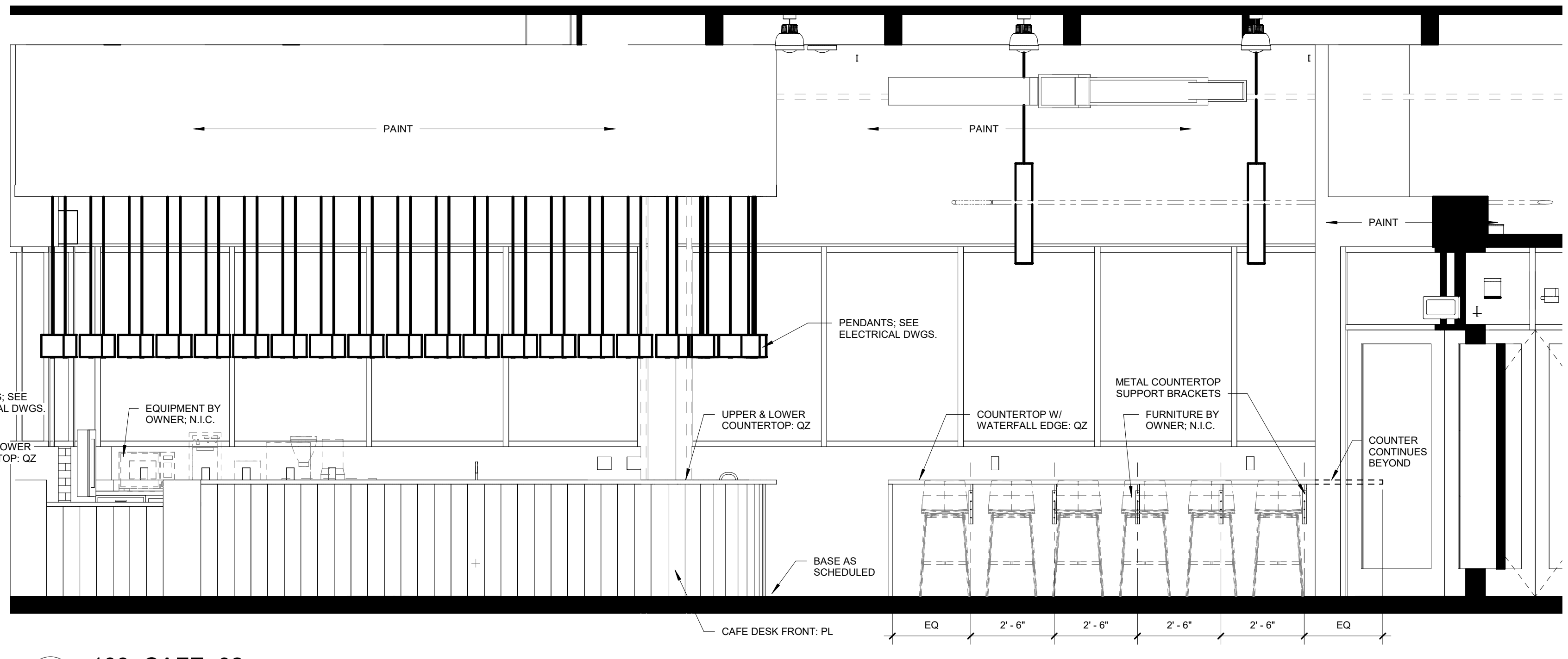
02 103_COMMON ACCENT
WALL ELEVATION
3/8" = 1'-0"



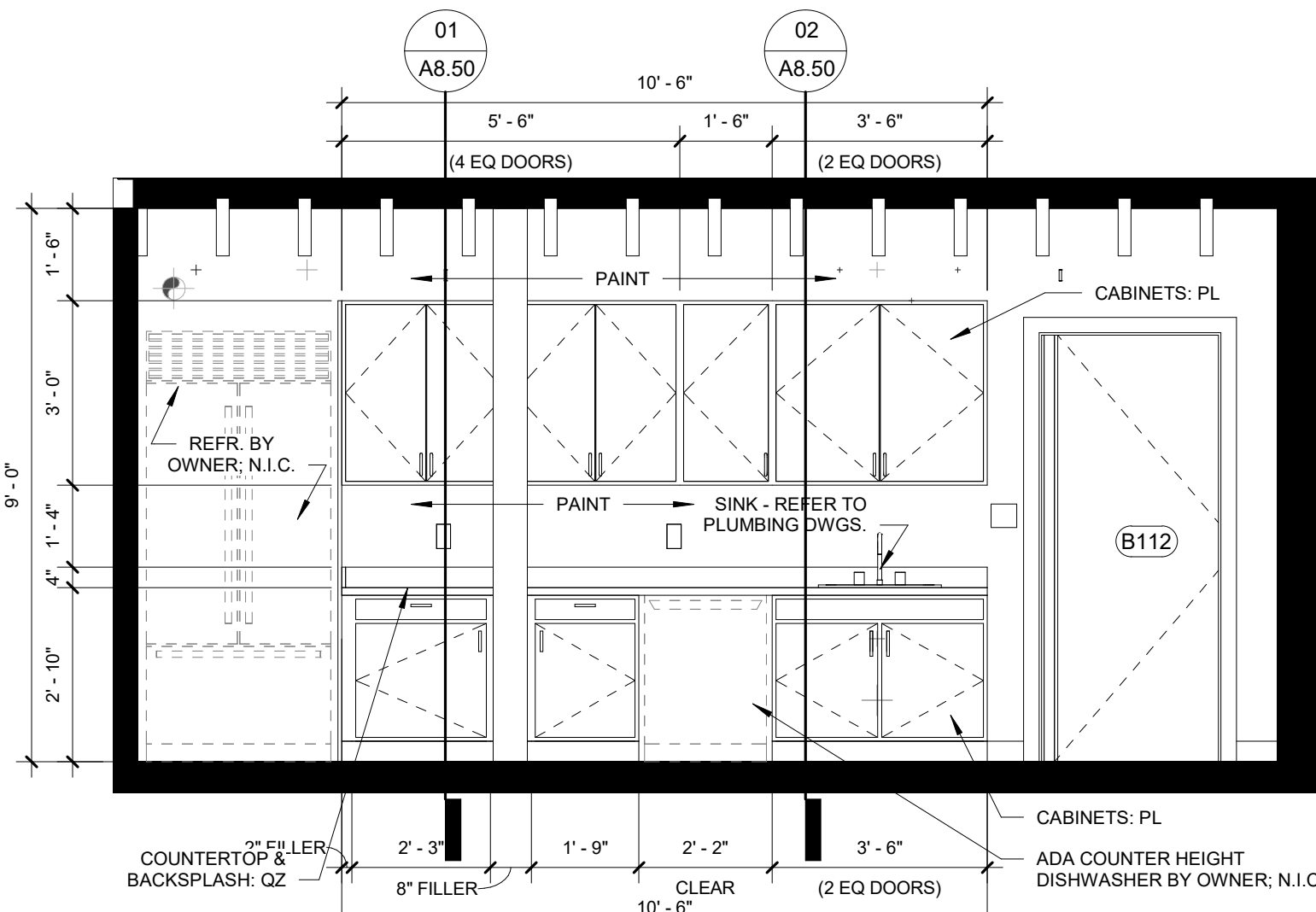
03 ENLARGED COMMONS /
CAFE PLAN
1/4" = 1'-0"



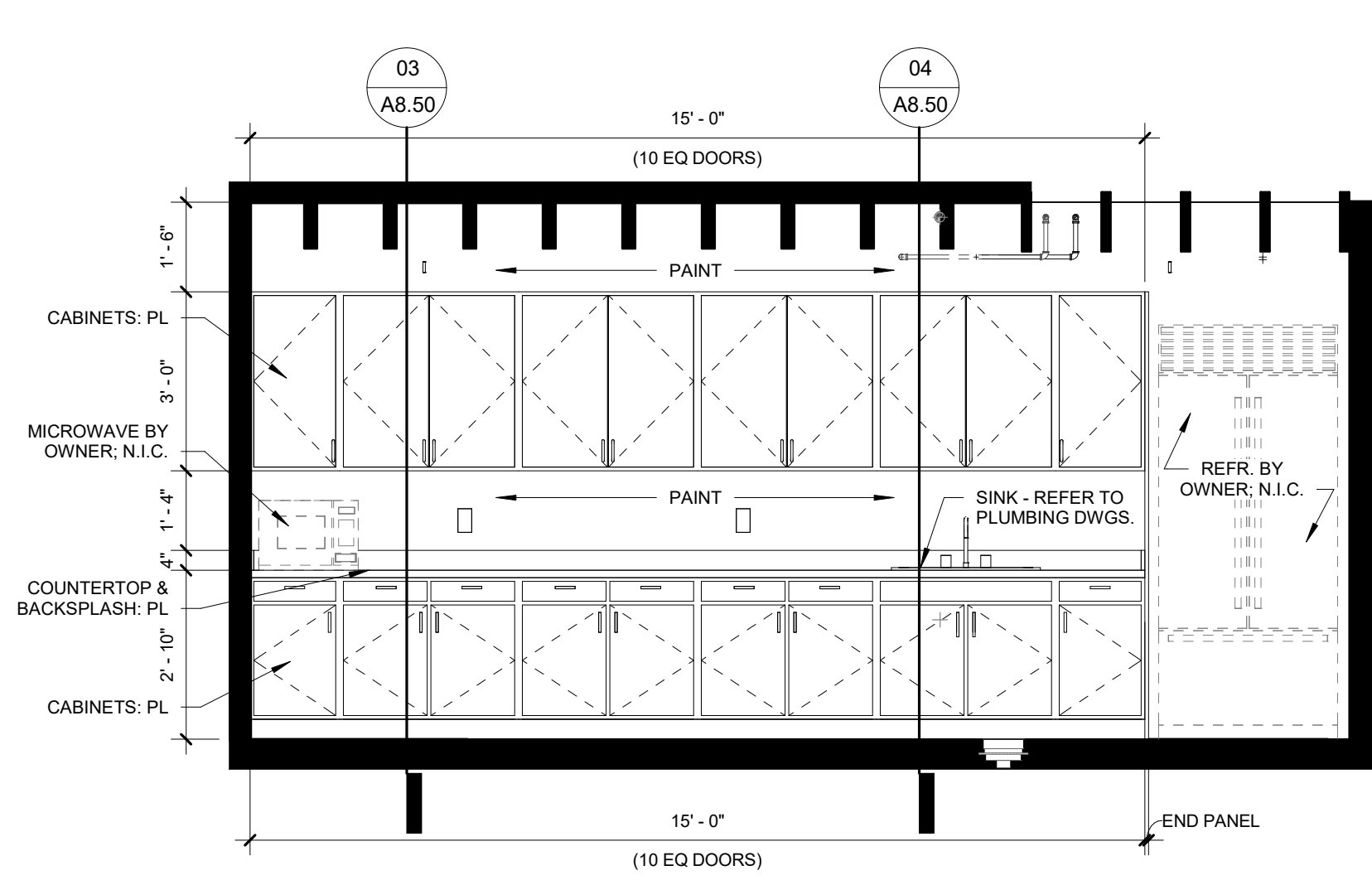
04 103_CAFE_01
3/8" = 1'-0"



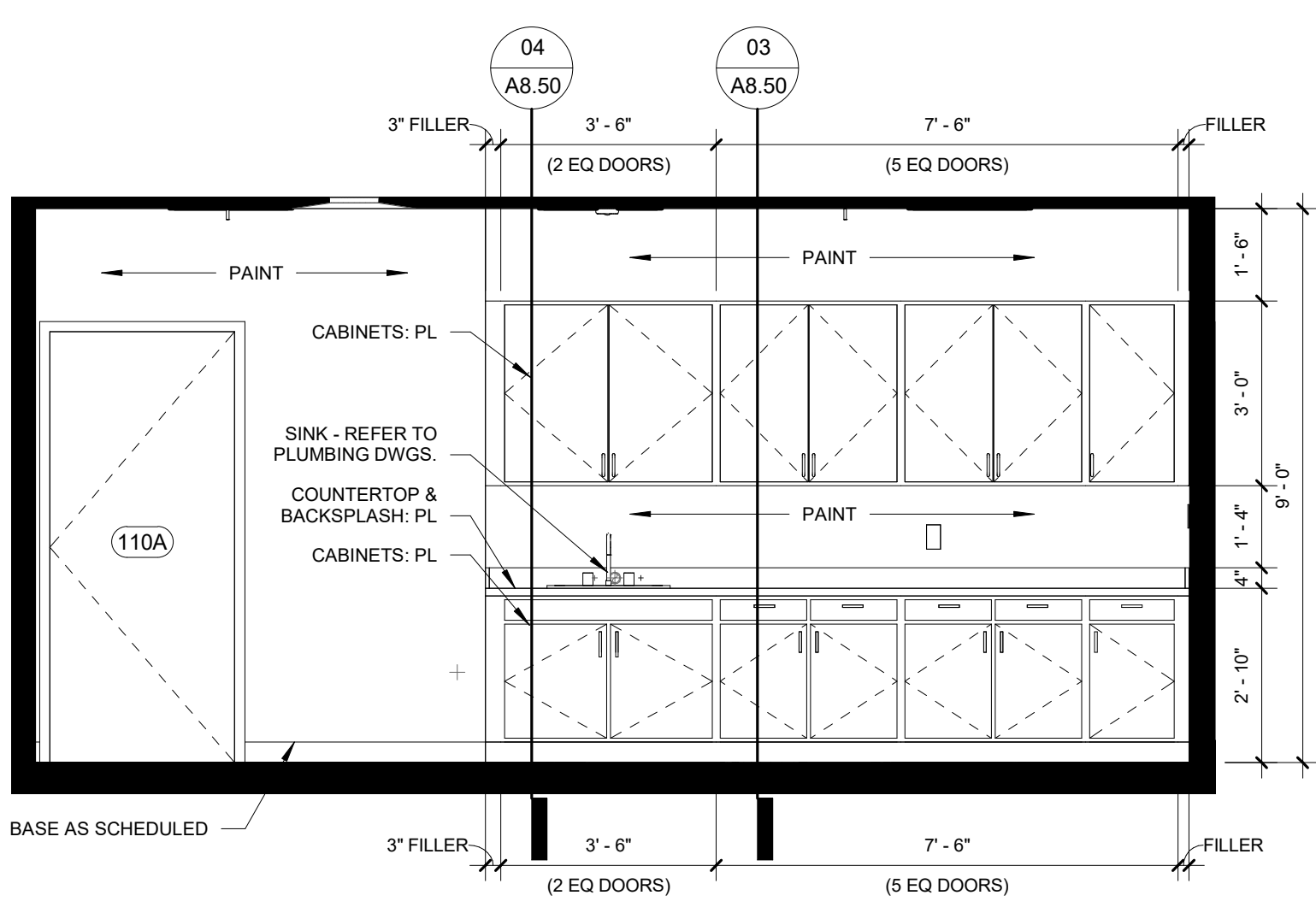
05 103_CAFE_02
3/8" = 1'-0"



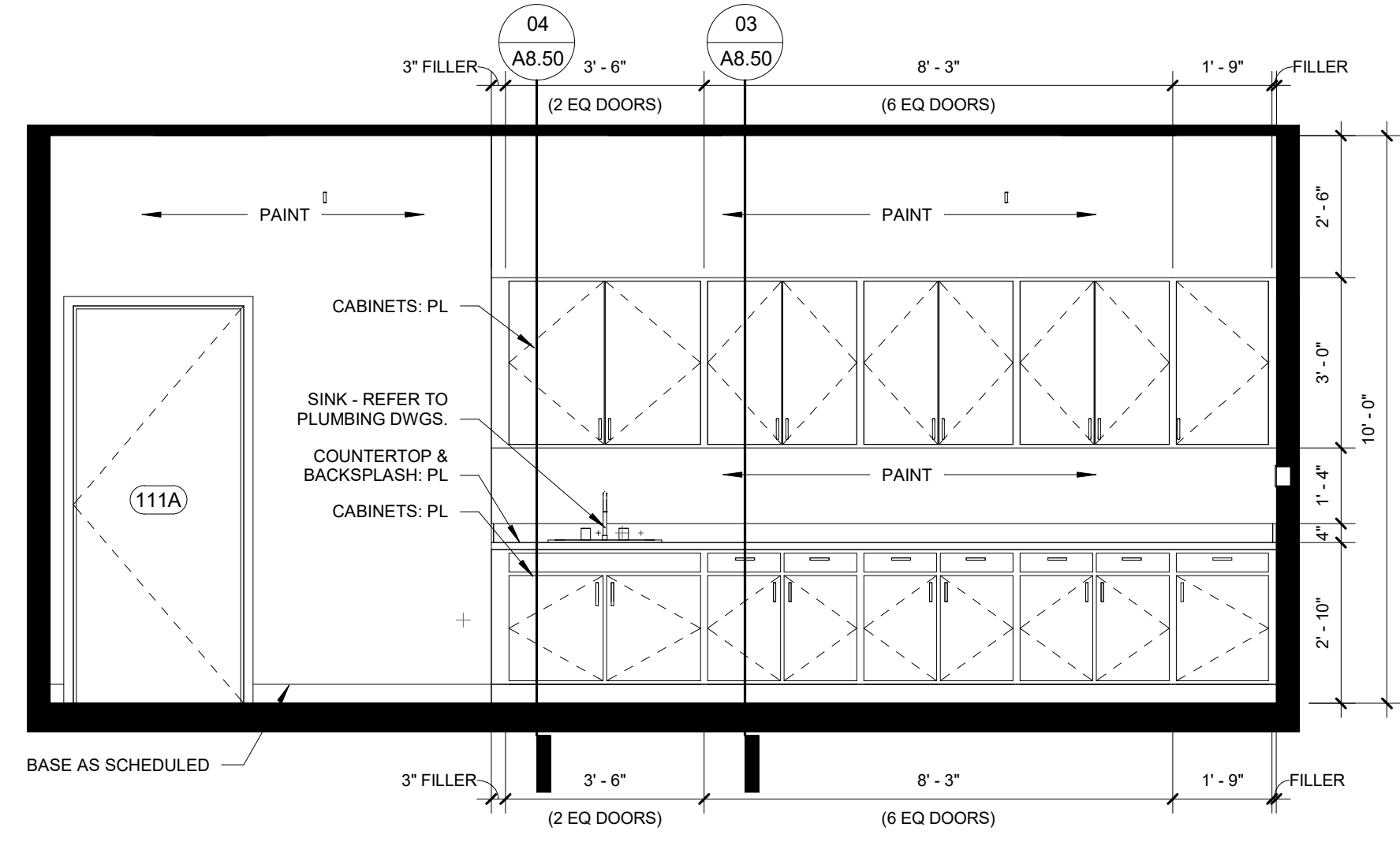
06 B110_GREEN ROOM_01
3/8" = 1'-0"



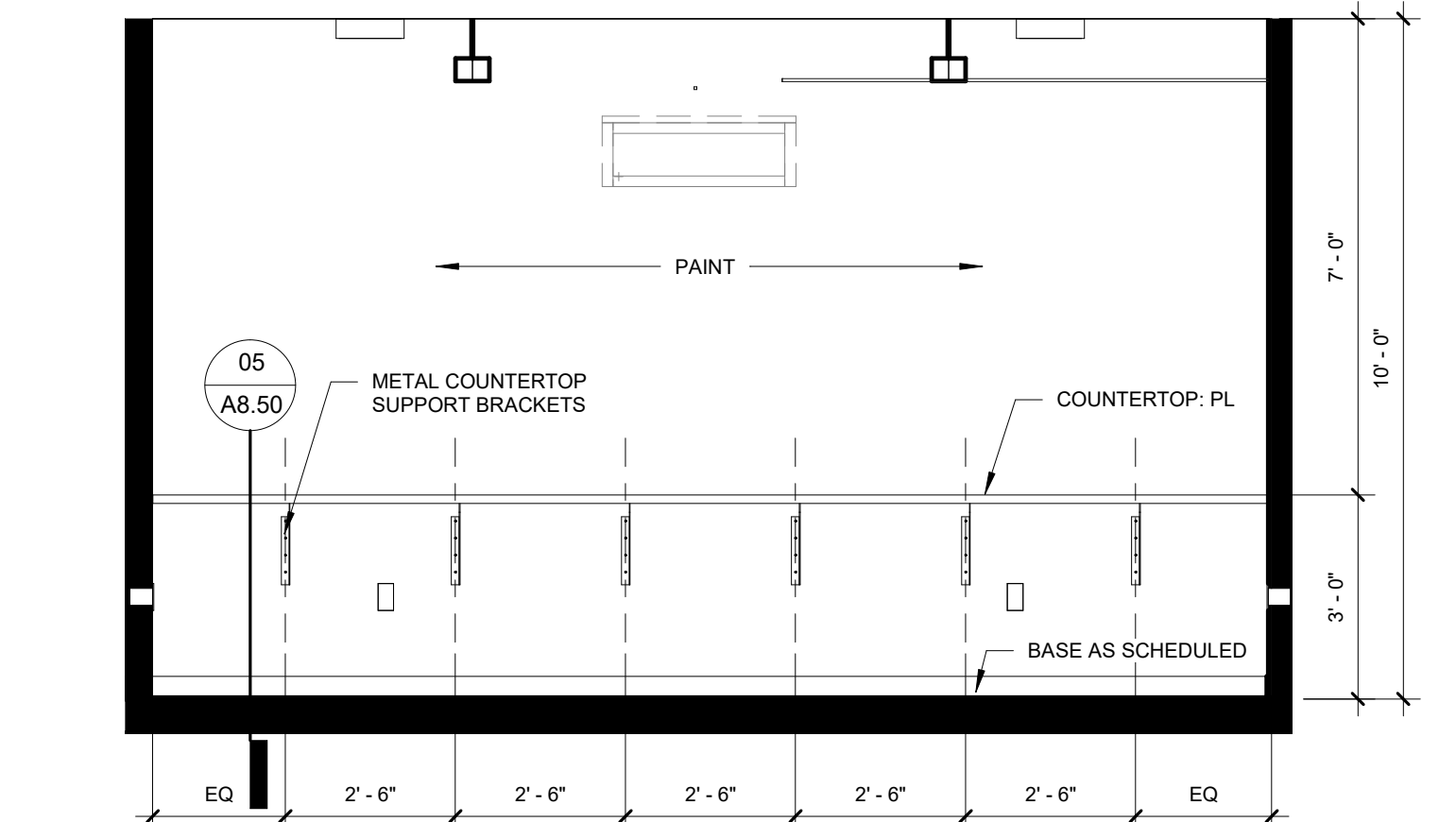
07 B120_VOLUNTEERS_01
3/8" = 1'-0"



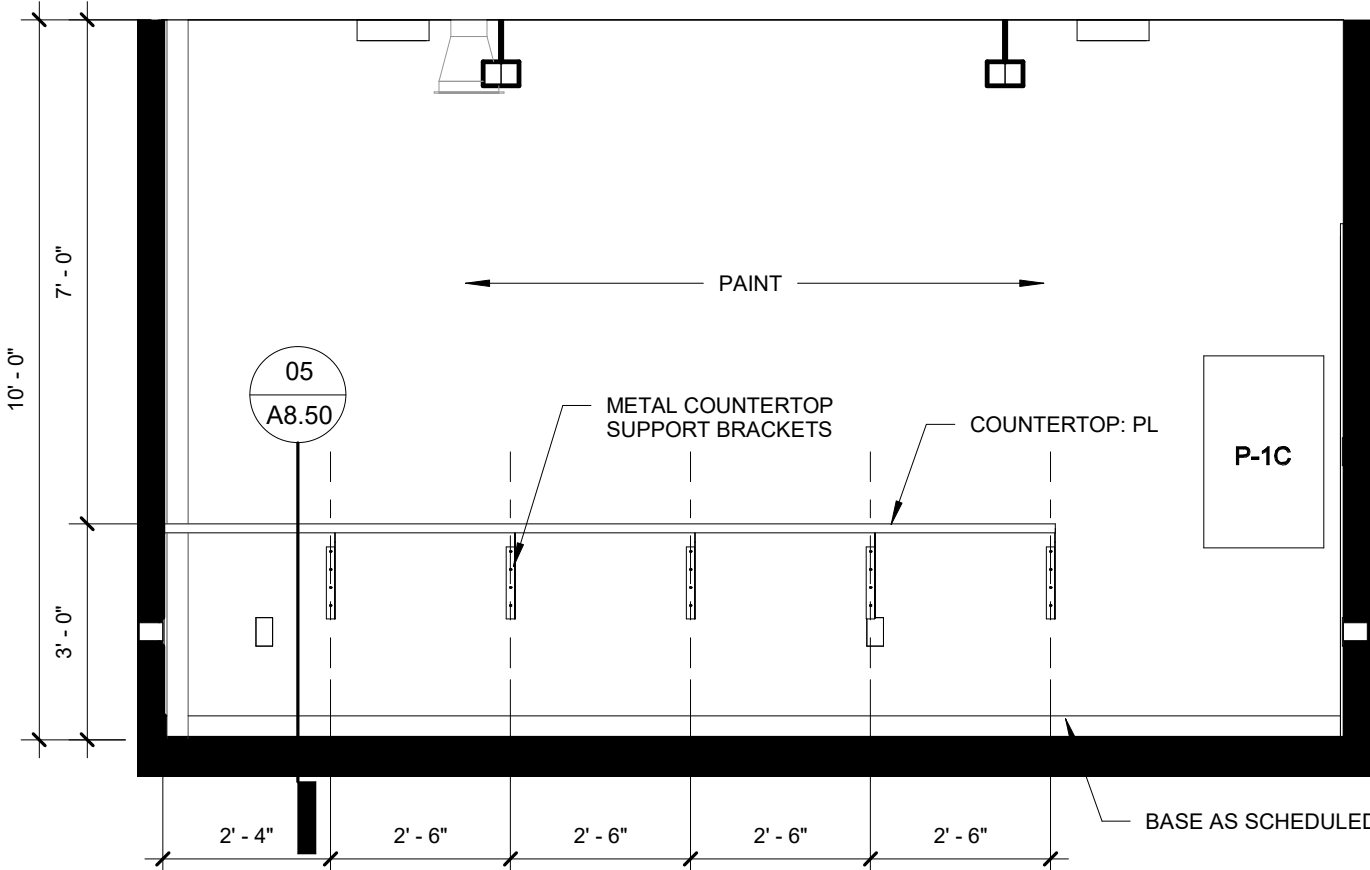
08 TYP. KIDS MILLWORK_01
3/8" = 1'-0"



09 TYP. KIDS MILLWORK_02
3/8" = 1'-0"



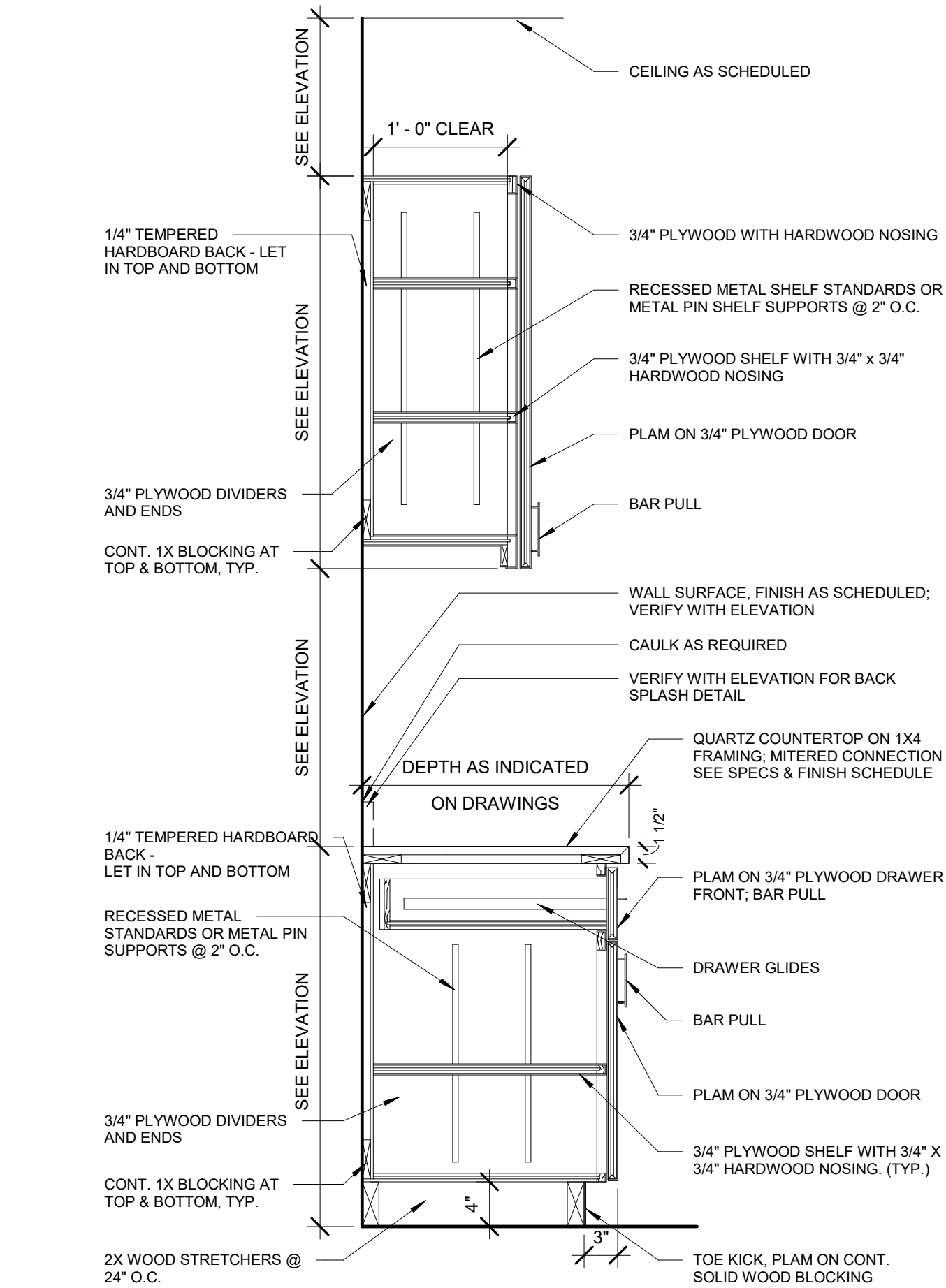
10 120B_CONTROL ROOM_01
3/8" = 1'-0"



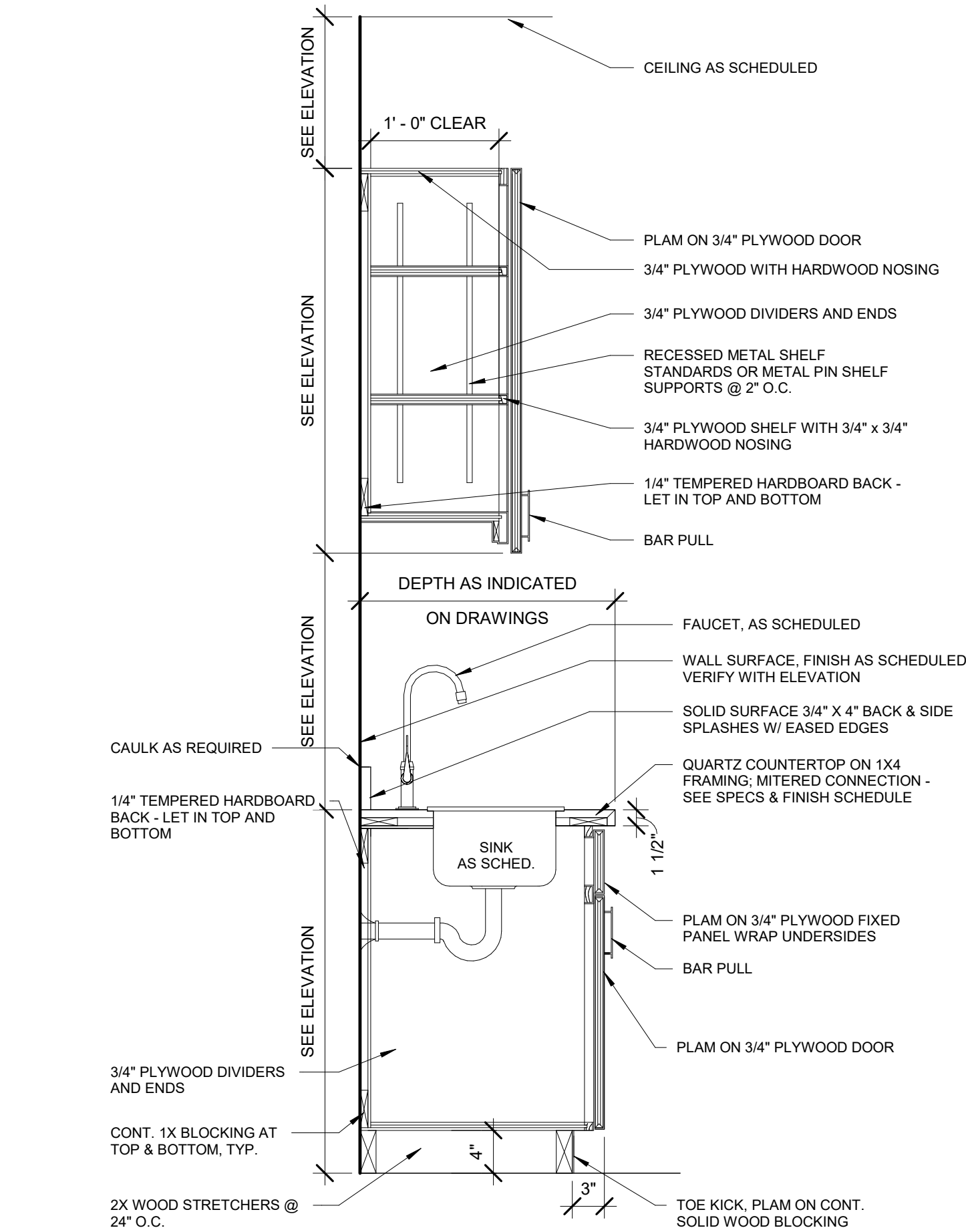
11 120B_CONTROL ROOM_02
3/8" = 1'-0"

INTERIOR ELEVATIONS GENERAL NOTES:

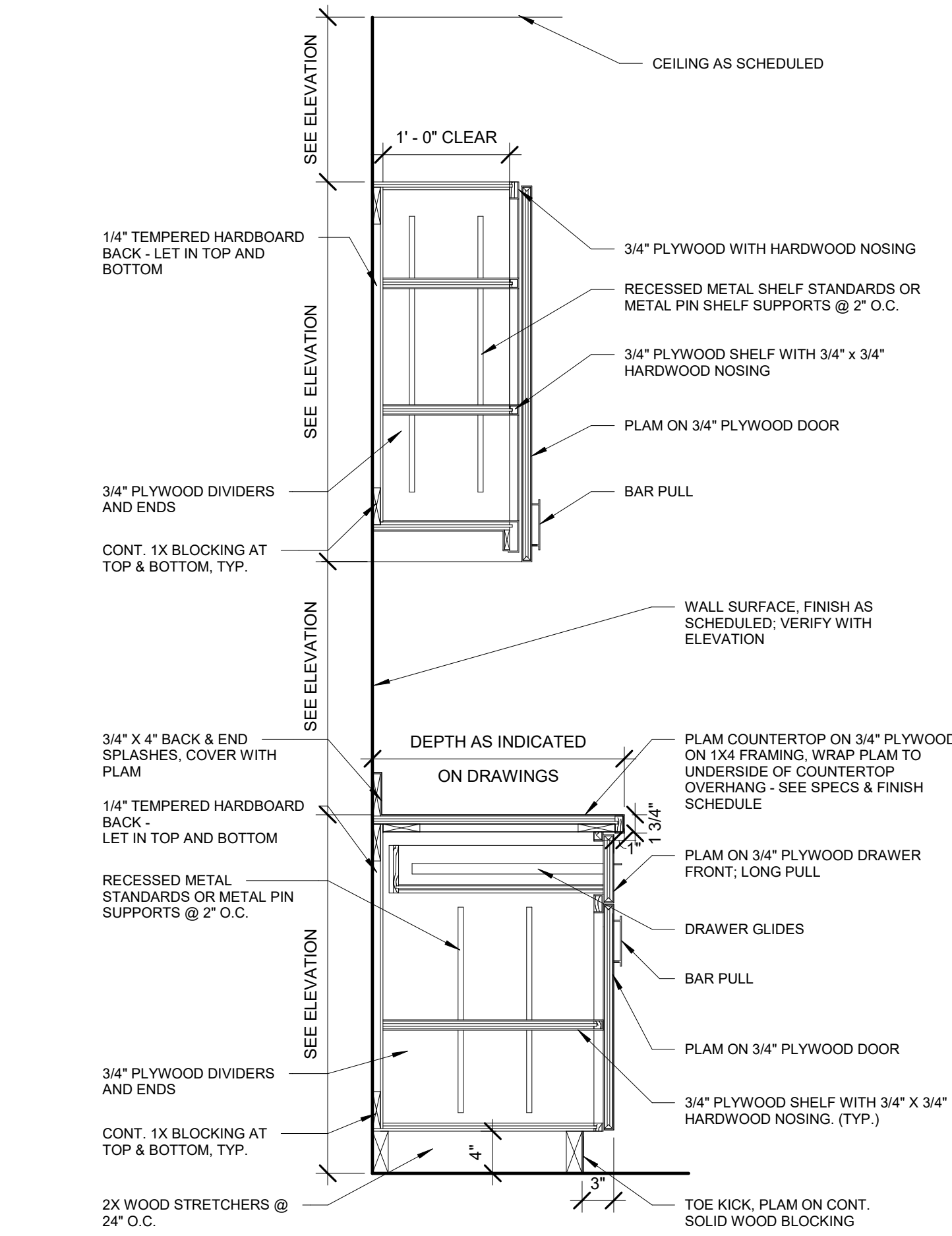
- 1) MATCH WALL TILE INSTALLATION AS SHOWN ON ELEVATIONS.
- 2) PROVIDE BLOCKING IN WALL FOR ALL TOILET ACCESSORIES & FUTURE TOILET ACCESSORIES.
- 3) PROVIDE BLOCKING IN WALL FOR METAL BRACKETS AS REQUIRED.
- 4) ALL TOILET ACCESSORIES TO BE STAINLESS STEEL WITH A SATIN FINISH, EXCEPT FOR TOILET ACCESSORIES IN SINGLE RESTROOMS IN APARTMENT UNITS, WHICH IS TO BE STAINLESS STEEL WITH A BRIGHT POLISH FINISH.



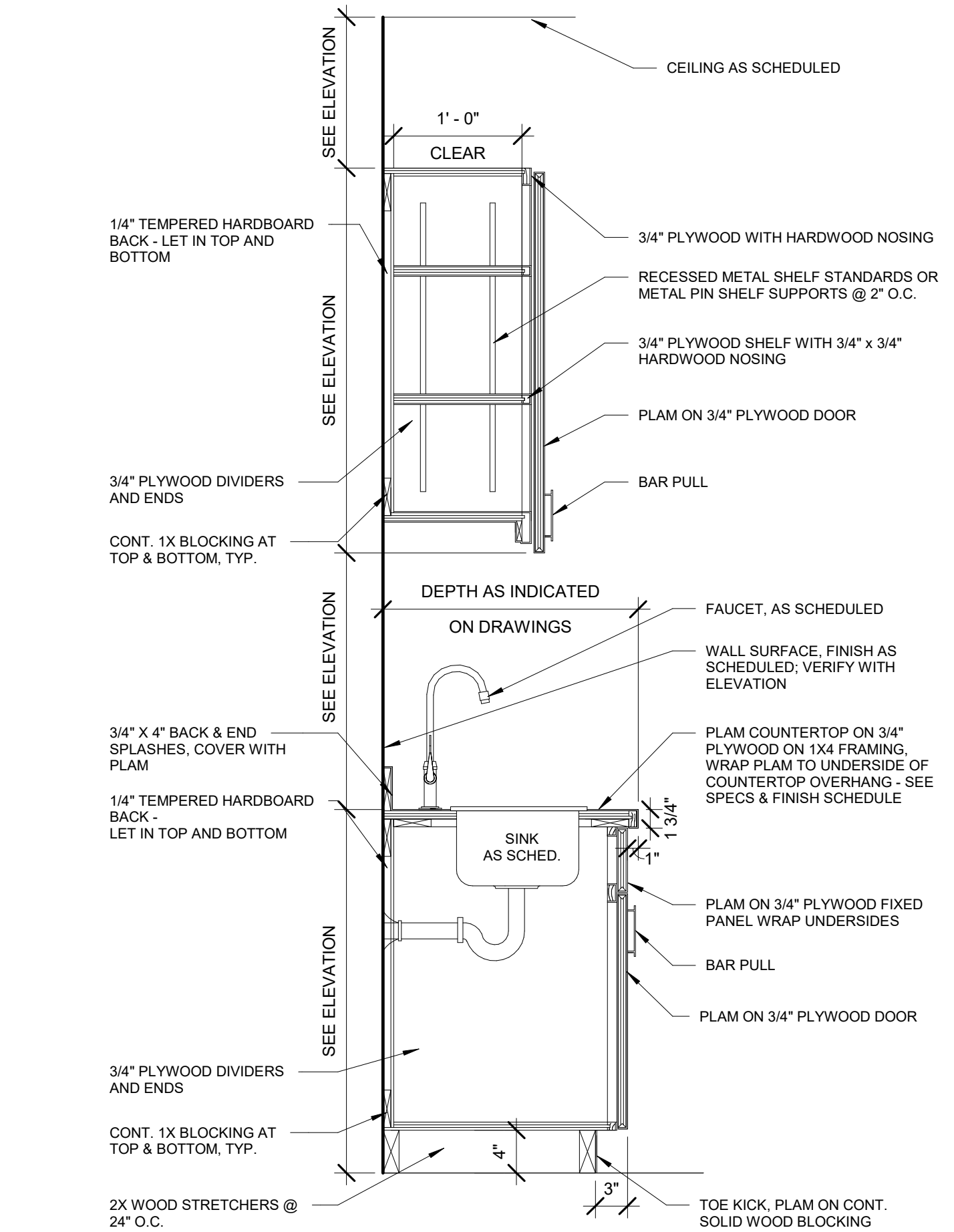
01 BASE & WALL CABS_QUARTZ
1" = 1'-0"



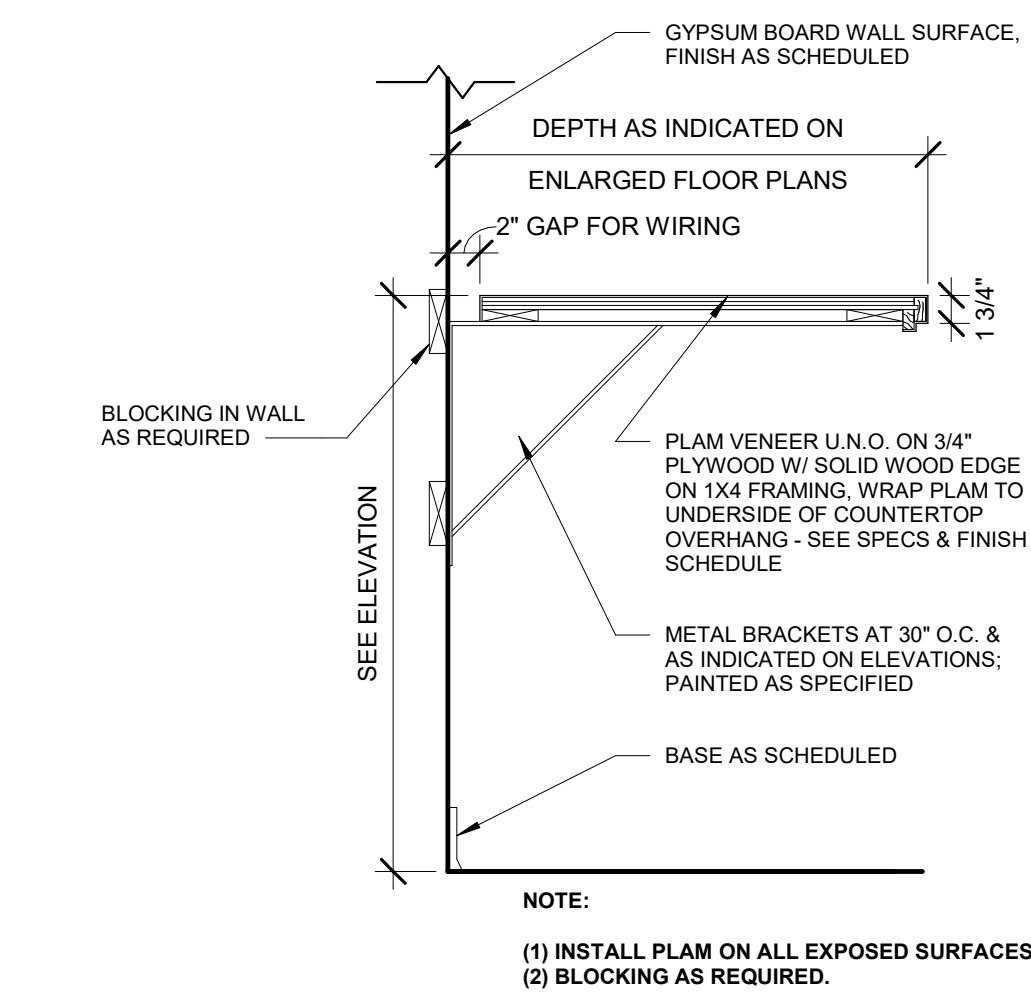
02 BASE & WALL CABS W/ SINK_QUARTZ
1" = 1'-0"



03 BASE & WALL CABS_PLAM
1" = 1'-0"



04 BASE & WALL CABS W/ SINK_PLAM
1" = 1'-0"



05 COUNTERTOP W/ WIRING GAP_PLAM
1" = 1'-0"

GENERAL NOTES:

1. THE DESIGN AND CONSTRUCTION OF THIS PROJECT IS GOVERNED BY THE RELATED PROVISIONS OF THE 2020 NEW YORK STATE UNIFORM FIRE PREVENTION AND EXISTING BUILDING CODE (UNIFORM CODE) AND STATE ENERGY CONSERVATION CONSTRUCTION CODE (ENERGY CODE) AND STANDARDS INCLUDING ASCE STANDARD (ASCE/SEI 7-16) MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
2. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, CIVIL AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION INCLUDING BUT NOT LIMITED TO: DIMENSIONS, SLOPES, DOOR AND WINDOW OPENINGS, NON-BEARING WALLS, STAIRS, FINISHES, DRAINS, WATERPROOFING, RAILINGS, MECHANICAL UNIT LOCATIONS, AND OTHER NON-STRUCTURAL ITEMS.
3. CONTRACTOR SHALL PROCURE ALL REQUIRED PERMITS IN ACCORDANCE WITH THE AUTHORITY HAVE JURISDICTION (AHJ) PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO BE RESPONSIBLE FOR COORDINATING DETAILS AND ACCURACY OF WORK WITH OTHER TRADES; FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; FOR SELECTING FABRICATION PROCESSES; FOR TECHNIQUES, MEANS AND METHODS OF ASSEMBLY; AND FOR PERFORMING WORK IN A SAFE AND SECURE MANNER.
5. CONTRACTOR TO BE RESPONSIBLE FOR STRENGTH AND STABILITY OF STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING, BRACING AND OTHER ELEMENTS REQUIRED TO MAINTAIN STABILITY UNTIL STRUCTURE IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE WITH THE WORK REQUIRED IN CONSTRUCTION DOCUMENTS AND REQUIREMENTS FOR EXECUTING IT PROPERLY. CONTRACTOR SHALL EMPLOY A REGISTERED ENGINEER FOR THE DESIGN OF TEMPORARY SHORING WHERE REQUIRED.
6. LOADS ON STRUCTURES DURING CONSTRUCTION SHALL NOT EXCEED THE DESIGN LOADS AS NOTED IN "DESIGN CRITERIA" OR THE CAPACITY OF PARTIALLY COMPLETED CONSTRUCTION AS DETERMINED BY CONTRACTOR'S SPECIALTY STRUCTURAL ENGINEER (SSE) FOR BRACING/SHORING. CONTRACTOR SHALL BE RESPONSIBLE FOR RETAINING THE SERVICES OF THE SSE TO SUPPORT CONSTRUCTION EFFORTS INCLUDING BUT NOT LIMITED TO TEMPORARY SHORING, RIGGING SUPPORT OR MEANS AND METHODS OF CONSTRUCTION.
7. MEANS AND METHODS OF CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR INCLUDING BUT NOT LIMITED TO TEMPORARY BRACING/ SHORING, RIGGING, TEMPORARY WORK PLATFORMS, DE-WATERING, CREATING AND MAINTAINING STAGING AND TEMPORARY WORK AREAS ETC. CONTRACTOR SHALL SUBMIT PLANS FOR ALL TEMPORARY EARTH WORK STABILITY INCLUDING BUT NOT LIMITED TO DE-WATERING AND SLOPE/ VERTICAL CUT STABILITY.
8. CONTRACTOR TO HAVE SOLE RESPONSIBILITY TO NOTIFY ENGINEER OF ANY BUILDING SYSTEM, MECHANICAL, ELECTRICAL, OR PLUMBING SYSTEM LOAD IMPOSED ONTO THE STRUCTURE THAT DIFFERS FROM, OR THAT IS NOT DOCUMENTED ON THE ORIGINAL CONTRACT DOCUMENTS (BUILDING SYSTEM, STRUCTURAL, MECHANICAL, ELECTRICAL, OR PLUMBING DRAWINGS).
9. IN THE CASE OF DISCREPANCIES BETWEEN GENERAL NOTES, SPECIFICATIONS, PLAN/DETAILS, REFERENCE STANDARDS, OR BETWEEN DISPLINES THE ENGINEER SHALL DETERMINE WHICH SHALL CONTROL. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
10. CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE. CONFLICTS BETWEEN DRAWINGS AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH WORK.
11. CONTRACTOR SHALL DETERMINE THE LOCATION OF ADJACENT UNDERGROUND UTILITIES PRIOR TO EARTHWORK, FOUNDATIONS, SHORING, AND EXCAVATION. UTILITY INFORMATION SHOWN ON DRAWINGS AND DETAILS IS APPROXIMATE AND NOT NECESSARILY COMPLETE.
12. DETAILS ENTITLED OR NOTED AS "TYPICAL" APPLY NOT ONLY WHERE SPECIFICALLY INDICATED OR REFERENCED, BUT ALSO IN ALL OTHER CASES WHERE THE NATURE OF THE CONSTRUCTION REQUIRES THEIR USE. DETERMINE APPLICABILITY OF TYPICAL DETAILS FROM DESCRIBING TITLES OR FROM THE SIMILARITY OF A CONSTRUCTION CONDITION TO ANOTHER CONDITION WHERE THE DETAIL IS SPECIFICALLY INDICATED OR REFERENCED.
13. USE WATER MIST, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT, COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION; DO NOT CAUSE ICING, FLOODING, OR TRANSPORTATION OF POLLUTANTS.
14. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES. APPLICABLE SAFETY CODES MEAN THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS, AND ADDITIONS THERE TO THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH STANDARDS (OSHA), AND APPLICABLE LOCAL SAFETY AND HEALTH REGULATIONS AND BUILDING CODES FOR CONSTRUCTION IN THE STATE OF NEW YORK IN ADDITION TO ANY AND ALL "HOUSE RULES" AS REQUIRED BY OWNER.
15. TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL SUBMIT A PROPOSED CONSTRUCTION SEQUENCE TO THE ENGINEER OR AS OTHERWISE DIRECTED IN THE PROJECT SPECIFICATIONS FOR APPROVAL.
16. EXPLORATORY EXCAVATIONS SHALL BE PERFORMED AS NEEDED BY THE CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO WORK IN CONGESTED UTILITY AREAS. ALL TEST PIT LOGS SHALL BE SUBMITTED TO THE ENGINEER WITHIN FOURTEEN (14) DAYS FOLLOWING NOTICE TO PROCEED UNLESS OTHERWISE DIRECTED BY THE SPECIFICATIONS OR ENGINEER.
17. THE GENERAL CHARACTER AND EXTENT OF THE WORK IS SHOWN ON THE CONTRACT DRAWINGS; HOWEVER, THE CONTRACTOR SHALL PROVIDE ALL WORK REQUIRED BY THE CONSTRUCTION DOCUMENTS REGARDLESS OF WHETHER OR NOT IT IS SHOWN ON THE DRAWINGS.

SUBMITTAL NOTES:

1. SUBMITTALS OF SHOP DRAWINGS AND PRODUCT DATA ARE REQUIRED FOR ALL MATERIALS, SYSTEMS AND COMPONENTS AND FOR DELEGATED DESIGN ELEMENTS.
2. SUBMITTALS SHALL BE MADE AND SUBMITTED IN TIME TO PROVIDE A MINIMUM OF TWO WEEKS FOR REVIEW BY THE ENGINEER PRIOR TO ONSET OF FABRICATION.
3. PRIOR TO SUBMISSION TO ENGINEER, CONTRACTOR SHALL REVIEW SUBMITTAL FOR COMPLETENESS; DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY ENGINEER AND THEREFORE MUST BE VERIFIED BY CONTRACTOR. CONTRACTOR SHALL PROVIDE ANY NECESSARY DIMENSIONAL DETAILS REQUESTED BY DETAILER AND PROVIDE CONTRACTOR'S REVIEW STAMP AND SIGNATURE BEFORE FORWARDING TO ENGINEER.
4. ONCE CONTRACTOR HAS COMPLETED CONTRACTOR'S REVIEW, ENGINEER WILL REVIEW SUBMITTAL FOR GENERAL CONFORMANCE WITH DESIGN CONCEPT AND CONTRACT DOCUMENTS OF BUILDING AND WILL STAMP SUBMITTAL ACCORDINGLY. MARKINGS OR COMMENTS SHALL NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR FROM COMPLIANCE WITH PROJECT PLANS AND SPECIFICATIONS. NOTE DEPARTURES THERE FROM NO FABRICATION SHALL COMMENCE UNTIL ALL RELEVANT SUBMITTALS HAVE BEEN REVIEWED BY ENGINEER AND STAMPED WITH NO EXCEPTIONS TAKEN.
5. WHEN SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) DIFFER FROM OR ADD TO THE REQUIREMENTS OF STRUCTURAL DRAWINGS THEY SHALL BE DESIGNED AND CERTIFIED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER.
6. REQUIRED SUBMITTALS ARE OUTLINED IN EACH RESPECTIVE SPECIFICATION SECTION. IN GENERAL, ALL ELEMENTS, PIECES, PROCESSES AND SYSTEMS SHALL BE SUBMITTED FOR REVIEW IN THE FORM OF SHOP DRAWINGS, CUT SHEETS AND/ OR MANUFACTURER PRODUCT LITERATURE AS APPROPRIATE.
7. REPRODUCTION OF CONTRACT DRAWINGS SHALL NOT BE USED AS SHOP DRAWINGS UNDER ANY CIRCUMSTANCE.
8. STOREFRONT SHALL BE A DELEGATED DESIGN BY THE CONTRACTOR. CONTRACTOR SHALL RETAIN THE SERVICES OF A QUALIFIED DESIGNER LICENSED IN THE STATE OF NEW YORK TO PERFORM, CERTIFY AND SUBMIT THE DESIGN PACKAGE. THE CONTRACTOR SHALL SUBMIT THIS PACKAGE PRIOR TO, OR ALONG WITH, ERECTION AND PIECE DRAWINGS. SEE LOADING SCHEDULE.

CAST-IN-PLACE CONCRETE

1. ALL CAST-IN-PLACE CONCRETE SHALL CONFORM TO THE FOLLOWING PROJECT SPECIFICATIONS:
- A. 033000 CAST IN PLACE CONCRETE
2. CONCRETE REINFORCING STEEL SHALL BE CONTINUOUS UNLESS OTHERWISE INDICATED. CONTINUOUS REINFORCING STEEL SHALL BE LAPPED IN ACCORDANCE ACI 318 AND THE SPECIFICATIONS.
3. SUBMIT A SIGNED AND SEALED MIX DESIGN.
4. WHERE SHOWN ON THE DRAWINGS, REINFORCEMENT SHALL BE DRILLED AND EPOXY GROUTED USING:
- B. HILTI HIT-HY 200 EPOXY OR APPROVED EQUAL
5. FINISH CONCRETE SURFACES IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
6. PROVIDE NON-SHRINK GROUT UNDER COLUMN BASEPLATES PER PROJECT SPECIFICATIONS.
7. COORDINATE THE PLACEMENT OF ELECTRICAL CONDUITS, PLUMBING FIXTURES AND DRAINS AND OTHER EMBEDDED ITEMS PRIOR TO POURING INTERIOR SLAB ON GRADES AND FOUNDATIONS.
8. CONTRACTOR TO KEEP A COPY OF THE FOLLOWING STANDARDS ON SITE DURING CONCRETE WORK:
- H. ACI 301 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE"
- I. ACI 302 "GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION"
- J. BUILDING CODE CHAPTER 19 – CONCRETE
- K. ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"
- L. ACI FIELD REFERENCE MANUAL, SP-15, "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301) WITH SELECTED ACI AND ASTM REFERENCES"

CONCRETE MASONRY UNIT (CMU)

1. ALL CONCRETE MASONRY SHALL CONFORM TO THE FOLLOWING PROJECT SPECIFICATIONS:
- A. 042200 CONCRETE UNIT MASONRY
2. COMPRESSIVE STRENGTH OF CONCRETE MASONRY CONSTRUCTION (CMU) WALL SYSTEM SHALL BE AS FOLLOWS: MASONRY STRENGTH NOT SPECIFICALLY NOTED IN PLAN SHALL BE (F_m = 1900 PSI MINIMUM. STRENGTH OF BLOCK ITSELF SHALL BE F_u = 1800 PSI MIN.
3. MORTAR SHALL CONFORM TO REQUIREMENTS OF TYPE M OR S.
4. COORDINATE THE PLACEMENT OF ALL EMBEDDED ITEMS WITHIN WALL, INCLUDING BUT NOT EXCLUSIVE TO ELECTRICAL CONDUITS AND PLUMBING FIXTURES.
5. CONCRETE REINFORCING STEEL SHALL BE CONTINUOUS UNLESS OTHERWISE INDICATED. CONTINUOUS REINFORCING STEEL SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING LIST:
- A. #4 REBAR 24 INCHES
- B. #5 REBAR 30 INCHES
6. MINIMUM VERTICAL WALL REINFORCING SHALL BE AS INDICATED IN THE PLANS AND SHALL BE FULL HEIGHT IN CENTER OF GROUTED CELL AT WALL INTERSECTIONS, CORNERS, AND DOOR JAMBS. ALL CORES CONTAINING VERTICAL BARS SHALL BE GROUTED.
7. LEAVE SPACE BETWEEN THE TOP OF NON-LOAD BEARING MASONRY WALLS AND THE ROOF STRUCTURAL SYSTEM AS SHOWN ON THE DRAWINGS. DO NOT SHIM OR GROUT SOLD.
8. BRACE THE TOP OF MASONRY WALLS USING "SLIP" TOP OF WALL ANCHORS WHERE SHOWN ON THE DRAWINGS.

WOOD

1. ALL WOOD SHALL CONFORM TO THE FOLLOWING PROJECT SPECIFICATIONS:
- A. 061000 ROUGH CARPENTRY
- B. 061600 SHEATHING
2. ALL DIMENSIONAL LUMBER SHALL BE DOUGLAS FIR (DF) NO. 2, OR BETTER.
- A. PRESERVATIVE TREATED WOOD MAY BE SPF #2 OR SOUTHERN YELLOW PINE #2 OR BETTER.
3. ALL FASTENING SHALL BE PER TABLE 2304.10.1 IN THE BUILDING CODE, UNLESS OTHERWISE NOTED.
4. ALL LUMBER IN CONTACT WITH CONCRETE OR CMU SHALL BE PRESERVATIVE TREATED PER SPECIFICATION 061000.
5. ALL ROOF SHEATHING SHALL BE 5/8" MIN THICK PLYWOOD.
- A. FASTENERS: 8d COMMON NAILS
- B. TYP EDGE NAIL SPACING: 6 INCHES ON CENTER
- C. TYP FIELD NAIL SPACING: 12 INCHES ON CENTER
6. ALL FLOOR SHEATHING SHALL BE 3/4" MIN THICK PLYWOOD.
- A. FASTENERS: 8d COMMON NAILS
- B. TYP EDGE NAIL SPACING: 6 INCHES ON CENTER
- C. TYP FIELD NAIL SPACING: 12 INCHES ON CENTER

SOILS AND FOUNDATION NOTES

1. CONFORM TO BUILDING CODE CHAPTER 18 "SOILS AND FOUNDATIONS".
2. FOUNDATION DESIGN IS BASED UPON CONSERVATIVE PRESUMPTIVE VALUES PER BUILDING CODE TABLE 1806.2. WE HAVE CONSERVATIVELY DESIGNED THE FOUNDATIONS FOR 1500PSF. A COMPETENT PERSON SHALL OBSERVE THE BEARING STRATA IN FIELD TO CONFIRM AT LEAST A 1500PSF BEARING CAPACITY IS APPROPRIATE.
- A. ZONE OF INFLUENCE OF ADJACENT FOUNDATIONS: 1.5H:1V SLOPE, UNLESS OTHERWISE NOTED.
- B. OSHA CLASS FOR EXCAVATIONS: OSHA TYPE "C" (1.5 HORIZ : 1 VERT), VERIFY IN FIELD.
- C. SEISMIC: SITE CLASS: D
3. ALL SUB-GRADES AND PREPARED SOIL BEARING SURFACES SHALL BE INSPECTED PER THE SPECIAL INSPECTION REQUIREMENTS PRIOR TO PLACEMENT OF FOUNDATION REINFORCING STEEL AND CONCRETE. THE CONTRACTOR SHALL ENSURE THAT THE INSPECTOR PROVIDES A LETTER TO THE ENGINEER STATING THAT SOILS ARE ADEQUATE TO SUPPORT "ALLOWABLE FOUNDATION BEARING PRESSURES" PRIOR TO THE START OF FOUNDATION CONSTRUCTION.

STEEL

1. ALL STRUCTURAL STEEL AND METALS SHALL CONFORM TO THE FOLLOWING PROJECT SPECIFICATIONS:
- A. 051200 STRUCTURAL STEEL FRAMING

SPECIAL INSPECTION NOTES:

1. THE OWNER SHALL ENGAGE THE SERVICES OF A QUALIFIED SPECIAL INSPECTOR FOR THE PROJECT, WHO WILL PROVIDE AND/OR COORDINATE INSPECTION AND TESTING REQUIREMENTS AS NECESSARY IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 17 OF THE BUILDING CODE.
2. IN ADDITION TO SPECIAL INSPECTIONS, INSPECTION OF FOUNDATIONS, FOOTINGS, SLABS AND UNDERSLAB SYSTEMS, LOWEST FLOOR ELEVATIONS, FRAMING, LATH AND GYPSUM BOARD, FIRE-RESISTANCE AND PENETRATIONS, ENERGY EFFICIENCY, PRELIMINARY AND FINAL INSPECTIONS MAY BE REQUIRED AND/OR PROVIDED BY THE LOCAL BUILDING OFFICIAL PER THE REQUIREMENTS OF THE NYS UNIFORM CODES. THE LOCAL BUILDING OFFICIAL MAY REQUIRE ADDITIONAL INSPECTIONS TO ASCERTAIN COMPLIANCE WITH THE PROVISIONS OF THE CODE. ALL INSPECTIONS REQUIRED AND/OR PROVIDED BY THE LOCAL BUILDING OFFICIAL SHALL BE AGREED UPON IN WRITING PRIOR TO THE START OF CONSTRUCTION.
3. SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH THE STATEMENT OF SPECIAL INSPECTIONS AND THE SCHEDULE OF SPECIAL INSPECTIONS AND SPECIFICATIONS TO BE SUBMITTED WITH THE CONTRACT DOCUMENTS AND THE APPLICATION FOR BUILDING PERMIT TO THE CODE ENFORCEMENT OFFICIAL. LOCAL BUILDING OFFICIALS CANNOT PROVIDE SPECIAL INSPECTIONS.
4. REFER TO THE SCHEDULE OF SPECIAL INSPECTIONS AND TO THE SPECIFICATIONS FOR REQUIRED SPECIAL INSPECTIONS AND TESTING. SPECIAL INSPECTIONS AND TESTING SHALL BE CONTINUOUS OR PERIODIC DURING THE PERFORMANCE OF THE WORK, AS NOTED.
5. THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING WITH THE ENGINEER, SPECIAL INSPECTOR, TESTING AGENCY, AND AFFECTED SUBCONTRACTORS TO REVIEW THE REQUIRED SPECIAL INSPECTION AND TESTING REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL DISTRIBUTE CONSTRUCTION SCHEDULES TO EACH ATTENDEE. A SEPARATE MEETING WITH THE LOCAL BUILDING OFFICIAL TO REVIEW INSPECTION REQUIREMENTS, AND TO CONFIRM THE ROLES AND RESPONSIBILITIES OF THE TESTING AGENCIES AND BUILDING OFFICIALS.
6. THE SPECIAL INSPECTOR SHALL SUBMIT INTERIM AND FINAL REPORTS AND, AT COMPLETION OF SPECIAL INSPECTIONS, A FINAL STATEMENT OF SPECIAL INSPECTIONS. REPORTS SHALL BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER. SPECIAL INSPECTORS SHALL KEEP RECORDS OF SPECIAL INSPECTIONS AND FURNISH TO CODE ENFORCEMENT OFFICIALS AND THE ENGINEER OF RECORD. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE WITH APPROVED CONSTRUCTION DOCUMENTS.
7. EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND- OR SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM OR A WIND- OR SEISMIC-RESISTING COMPONENT LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE CODE ENFORCEMENT OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT IN ACCORDANCE WITH BUILDING CODE CHAPTER 17 "CONTRACTOR RESPONSIBILITY".
8. SPECIAL INSPECTIONS ARE TO BE CONDUCTED IN ACCORDANCE TO SPECIFICATION SECTIONS:
- A. 014100 SPECIAL INSPECTIONS AND TESTING
- B. 014100 STATEMENT OF SPECIAL INSPECTIONS

COLD FORMED STEEL

1. ALL STRUCTURAL COLD FORMED STEEL AND METALS SHALL CONFORM TO THE FOLLOWING PROJECT SPECIFICATIONS:
- A. 054000 COLD-FORMED METAL FRAMING
- B. 055500 METAL FABRICATION
2. ALL EXTERIOR STEEL AND FASTENERS SHALL BE HOT-DIPPED GALVANIZED
3. ALL PAF SHALL BE X-U x 0.157" BY HILTI OR APPROVED EQUAL.

COLD FORMED SHEAR WALL SCHEDULE

SHEAR WALL SCHEDULE					
CALLOUT	LENGTH	WALL TYPE	END CONDITION (SOUTH)	END CONDITION (NORTH)	
SW1	19'-5 1/2"	DOUBLE SIDED	HSS COL. SEE PLAN		
SW2	22'-4"	SINGLE SIDED	(2) 18 GAUGE STUDS W/HOLD-DOWN A	FASTEN TO (E) MASONRY WALL. SEE PLAN	
SW3	18'-10"	SINGLE SIDED	(4) 18 GAUGE STUDS W/HOLD-DOWN C	FASTEN TO (E) MASONRY WALL. SEE PLAN	
SW4	11'-2 1/2"	SINGLE SIDED	(4) 18 GAUGE STUDS W/HOLD-DOWN B	(4) 18 GAUGE STUDS W/HOLD-DOWN B	
SW5	13'-8"	SINGLE SIDED	(2) 18 GAUGE STUDS W/HOLD-DOWN A	(2) 18 GAUGE STUDS W/HOLD-DOWN A	
SW6	19'-2"	SINGLE SIDED	(4) 18 GAUGE STUDS W/HOLD-DOWN B	FASTEN TO (E) MASONRY WALL. SEE PLAN	
SW7	14'-2 1/2"	SINGLE SIDED	(2) 18 GAUGE STUDS W/HOLD-DOWN A	FASTEN TO (E) MASONRY WALL. SEE PLAN	
SW8	14'-1 1/2"	SINGLE SIDED	(2) 18 GAUGE STUDS W/HOLD-DOWN A	FASTEN TO (E) MASONRY WALL. SEE PLAN	

- NOTES:
1. ALL SHEAR WALL SHEATHING TO BE 1/4" STRUCTURAL 1.
2. ALL FASTENERS SHALL BE #8 SIMPSON STRONG-TIE CBSDD SHEATHING-TO-OFS SCREWS.
3. ALL COLD-FORMED STEEL STUDS SHALL BE 6"x18 GAUGE WITH 18" MAX SPACING.
4. ALL SHEATHING EDGES SHALL BE ATTACHED TO FRAMING OR 12" WIDTH 20 GAUGE BLOCKING.
5. FASTEN SCREWS AT 6" o.c. ON EDGE AND 12" o.c. IN FIELD.
6. SEE ARCHITECTURAL DRAWINGS FOR WALL FINISH INFORMATION.
7. SEE DETAIL 8/5501 FOR HOLD-DOWN TYPES.

CONCRETE FOOTING SCHEDULE

FOOTING SCHEDULE				
CALLOUT	SIZE	THICKNESS	REINFORCING	
F2.5	2'-6" x 2'-6"	1'-2"	(3) #5 EACH WAY. BOT.	
F3.5	3'-6" x 3'-6"	1'-2"	(4) #5 EACH WAY. BOT.	
F4.0x5.0	4'-0" x 5'-0"	1'-2"	(5) #5 EACH WAY. BOT.	
F5.0	5'-0" x 5'-0"	1'-2"	(5) #5 EACH WAY. BOT.	

DESIGN CRITERIA:

ALL WORK SHALL COMPLY WITH THE RELATED PROVISIONS OF THE UNIFORM CODE OF NEW YORK STATE AND ITS REFERENCE STANDARDS.

DESIGN BASIS:
GOVERNING CODE.....2020 EXISTING BUILDING CODE
WORK CLASSIFICATION.....CHANGE OF OCCUPANCY

BUILDING INFORMATION
RISK CATEGORY.....III

DESIGN CRITERIA
(ALL LOADS PROVIDED BELOW ARE SERVICE-LEVEL LOADS)

DEAD LOADS:
PRIMARY STRUCTURE.....SELF-WEIGHT
SECONDARY ROOF STRUCTURE (I.E. DECKING, FINISHES, ETC.).....SELF-WEIGHT
SECONDARY WALL STRUCTURES (I.E. FACADE, INSULATION ETC.).....SELF-WEIGHT
SUSPENDED ROOF LOADING (I.E. W/E/P, CONDENSATIONAL LOADS, ETC.).....7 PSF
ROOF INSULATION AND VAPOR BARRIERS.....SELF-WEIGHT

LIVE LOADS:
ROOF.....20 PSF
FIXED SEATING.....60 PSF
STAGE FLOOR.....150 PSF
LOBBY/CORRIDOR.....100 PSF
CLASSROOM.....40 PSF
OFFICE.....100 PSF
RESTROOMS.....60 PSF
PARTITION LOADING.....15 PSF
LIGHT STORAGE.....125 PSF
ELEVATOR (CONCENTRATED).....18 KIPS

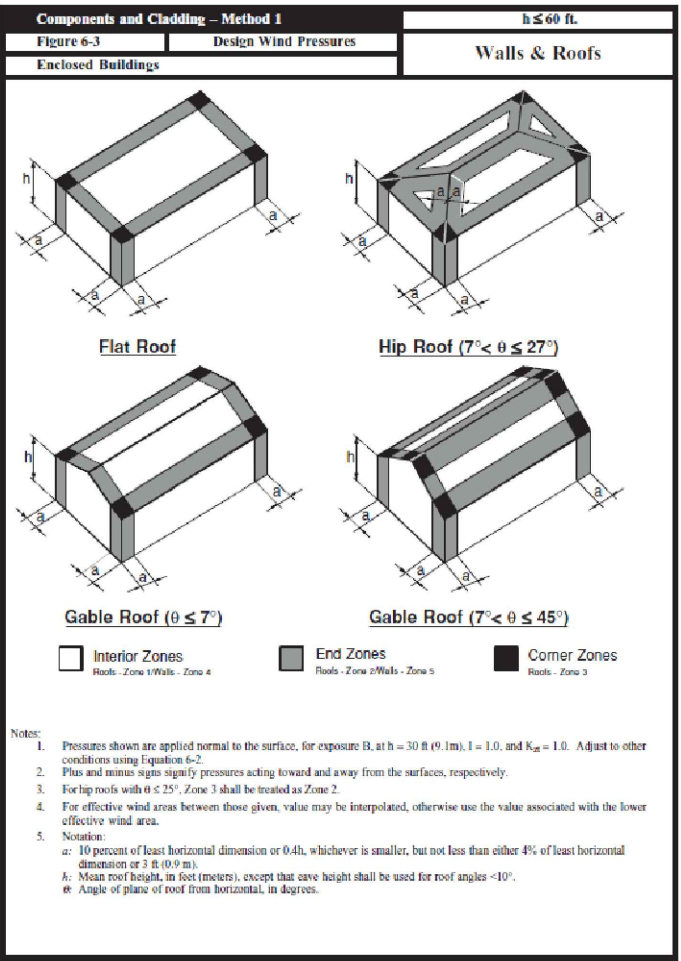
SNOW LOADS:
GROUND SNOW LOAD (P_g).....25 PSF
ROOF SNOW LOAD (P_s).....FULLY EXPOSED
EXPOSURE FACTOR (C_e).....0.9
IMPORTANCE FACTOR (I_s).....1.0
THERMAL FACTOR (C_t).....1.0
FLAT ROOF SNOW LOAD (P_f).....17.3 PSF
MINIMUM ROOF SNOW LOAD (P_m).....22 PSF
ROOF SYSTEM AND SLOPE.....APPROX. 1" ON 12
ROOF SLOPE FACTOR (C_s).....1.0
SLOPED ROOF SNOW LOAD (P_s).....17.3 PSF
DRIFT LOADS.....SEE LOADING DIAGRAMS

WIND LOADS:
RISK CATEGORY.....III
ULTIMATE WIND SPEED (3-SECOND GUST, V_{ult}).....127 MPH
NOMINAL WIND SPEED (V_{ref}).....98 MPH
EXPOSURE CATEGORY.....C
INTERNAL PRESSURE COEFFICIENT (C_{pi}).....±0.18 (ENCLOSED)
COMPONENTS AND CLADDING DESIGN WIND PRESSURES.....SEE DIAGRAM

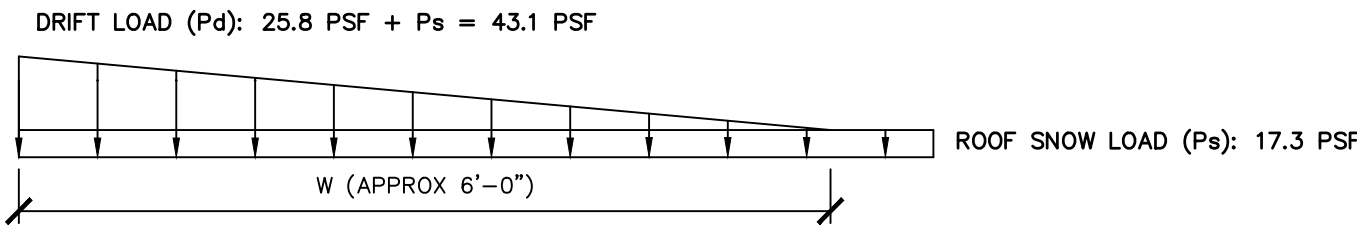
EARTHQUAKE DESIGN DATA
RISK CATEGORY.....III
IMPORTANCE FACTOR (I_w).....1.25
MAPPED SPECTRAL RESPONSE ACCELERATION FOR SHORT PERIODS (S_s).....0.286g
MAPPED SPECTRAL RESPONSE ACCELERATION FOR 1-SECOND PERIODS (S₁).....0.060g
SITE CLASS.....D (ASSUMED)
SPECTRAL RESPONSE ACCELERATION FOR SHORT PERIODS (S_{ss}).....0.300g
SPECTRAL RESPONSE ACCELERATION FOR 1-SECOND PERIODS (S_{1s}).....0.061g
SEISMIC DESIGN CATEGORY.....B
BASIC SEISMIC FORCE RESISTING SYSTEM.....EXISTING
RESPONSE MODIFICATION FACTOR (R).....8
DESIGN BASE SHEAR.....EQUIVALENT LATERAL FORCE EXISTING ANALYSIS PROCEDURE
SEISMIC DESIGN OF NON-STRUCTURAL COMPONENTS.....PER ASCE7-16 CHAPTER 13

CHANGE OF OCCUPANCY:
• THE LIVE LOAD DEMAND-CAPACITY RATIO FOR EACH STRUCTURAL ELEMENT IS NOT MORE THAN 5% GREATER THAN THE DEMAND-CAPACITY RATIO BASED ON PREVIOUSLY APPROVED LIVE LOADS WITH THE EXCEPTION OF THE STAGE AND LIGHT STORAGE LOCATIONS WHICH HAVE BEEN ANALYZED, DESIGNED, AND ALTERED AS REQUIRED TO MEET SECTION 1607 OF THE BCNYS.
• SECTION 15 AND THE RISK CATEGORY IS CHANGING FROM II TO III, EXEMPTING THE STRUCTURE FROM MEETING SECTION (BS) 1006.3 OF THE EBCNYS.
• THE STRUCTURE HAS BE ANALYZED, DESIGNED, AND ALTERED AS REQUIRED TO MEET SECTIONS 1608 AND 1609 OF THE BCNYS WITH REGARDS TO SNOW AND WIND LOADING.

ALTERATION LEVEL 3
• EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENTS DO NOT HAVE DEAD, LIVE, OR SNOW LOAD INCREASES GREATER THAN 5% RESULTING FROM THIS ALTERATION WITH THE EXCEPTION OF THE LIVE LOAD AT THE STAGE AND LIGHT STORAGE LOCATIONS WHICH HAVE BEEN ANALYZED, DESIGNED, AND ALTERED AS REQUIRED TO MEET SECTION 1607 OF THE BCNYS.
• EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENTS DO NOT HAVE DECREASED CAPACITY RESULTING FROM THIS ALTERATION.
• EXISTING LATERAL LOAD-CARRYING STRUCTURAL ELEMENTS DEMAND-CAPACITY RATIO HAS NOT INCREASED BY MORE THAN 10% AS A RESULT OF THIS ALTERATION.
• LESS THAN 30% OF THE FLOOR / ROOF AREA OF THE GRAVITY LOAD-CARRYING STRUCTURAL ELEMENTS WILL BE ALTERED OR HAVE BEEN ALTERED WITHIN A 5-YEAR PERIOD. THEREFORE, WORK DOES NOT INVOLVE A SUBSTANTIAL STRUCTURAL ALTERATION PER CHAPTER 2 OF THE EBCNYS AND THEREFORE IS NOT REQUIRED TO BE SHOWN TO SATISFY THE LIMITS OF SECTION 1609 OF THE BCNYS.



1 COMPONENT AND CLADDING WIND DESIGN PRESSURE FOR FLAT ROOF SLOPED ROOF SCALE: N.T.S.



2 PARAPET DRIFT LOAD SCALE: N.T.S.

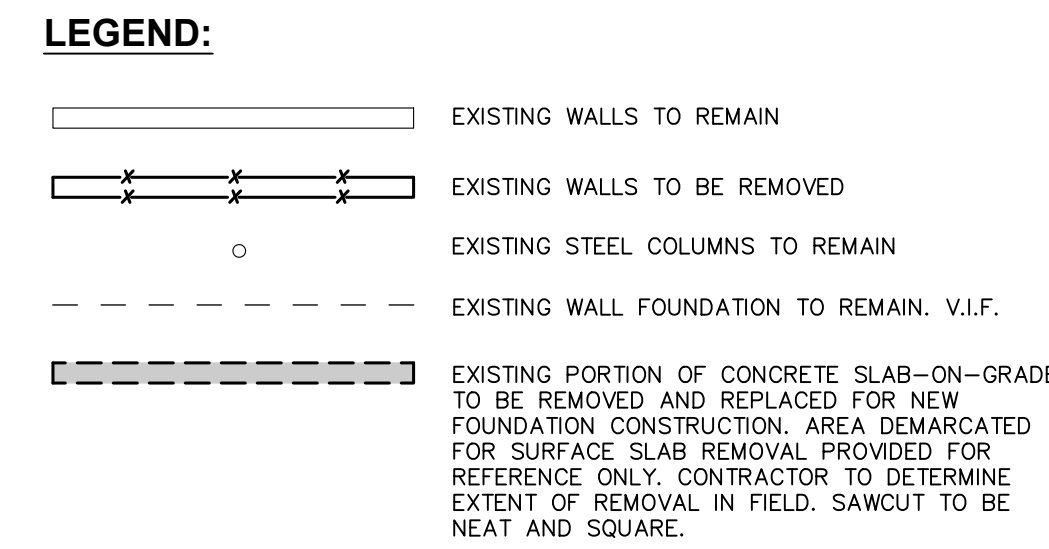


Revisions
No. Description Date

275 Mamaroneck Ave.
Mamaroneck, NY 10543

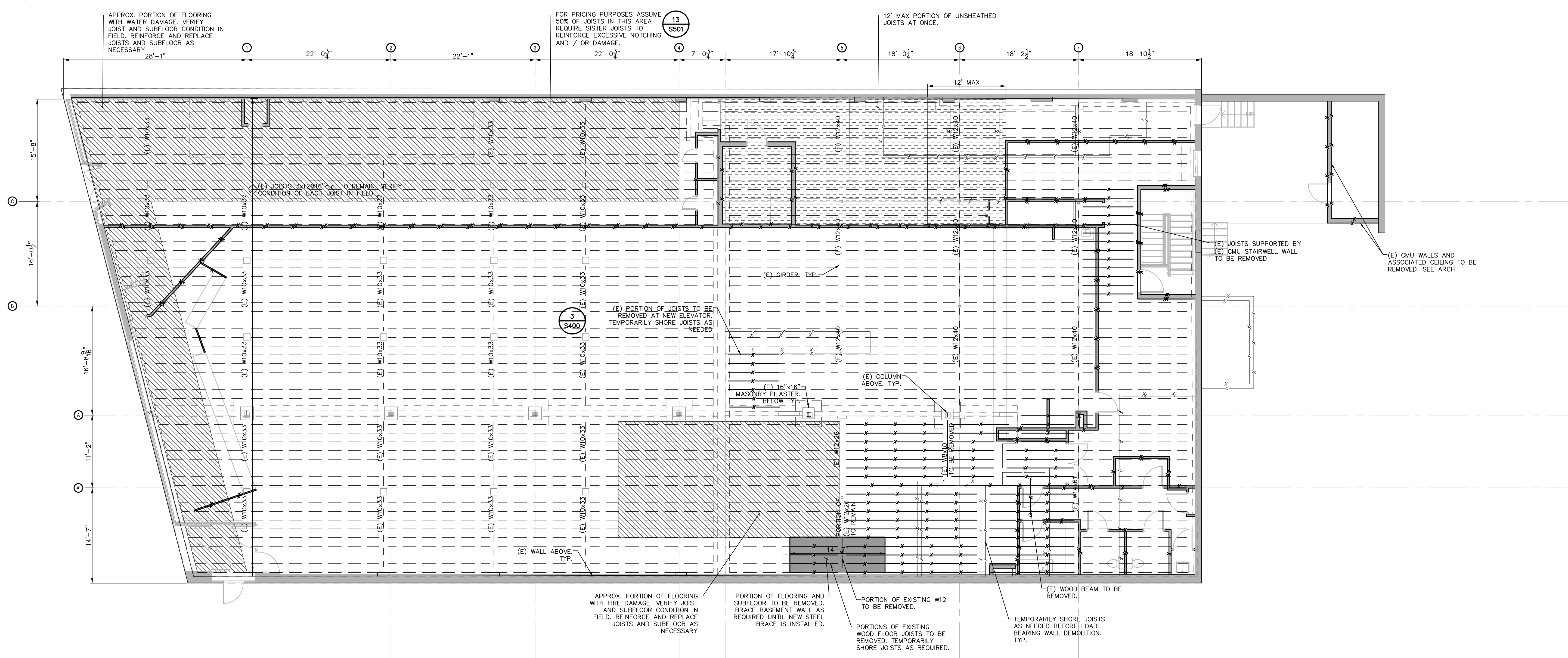
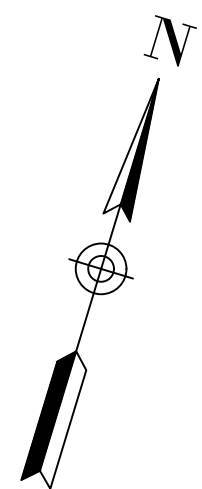
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Date
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DESIGN DATA

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1 FLOOR DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

- LEGEND:**
- EXISTING WALLS TO REMAIN
 - EXISTING WALLS BELOW TO REMAIN
 - EXISTING WALLS BELOW TO BE REMOVED
 - EXISTING WALLS TO BE REMOVED. SEE ARCHITECT
 - EXISTING STEEL COLUMNS BELOW TO REMAIN
 - EXISTING GIRDERS AND BEAMS TO REMAIN
 - EXISTING FRAMING TO BE REMOVED AND SUPPORTED FLOORING ABOVE TO BE REMOVED
 - EXISTING JOISTS AND SHEATHING TO BE INSPECTED FOR DEFICIENCIES SUCH AS, BUT NOT LIMITED, TO WATER OR FIRE DAMAGE. FOR PRICING PURPOSES, ASSUME 50% OF HATCHED AREA TO REQUIRE SISTER JOISTS TO REINFORCE EXCESSIVE NOTCHING AND / OR DAMAGE AND 50% OF SHEATHING IN HATCHED AREA TO REQUIRE REPLACEMENT.
 - EXISTING SHEATHING TO BE REMOVED AND REPLACED IN 12' SECTIONS. INSTALL NEW 3/4" TONGUE AND GROOVE PLYWOOD.



Revisions		
No.	Description	Date

LIFE Church, NY

Owner

275 Mamaroneck Ave.
Mamaroneck, NY 10543

Project Number
20007

Date
03.03.21

FIRST FLOOR
DEMOLITION
PLAN

SD110

01.11.21



Revisions	
Description	Date

Owner

275 Mamaroneck Ave.
Mamaroneck, NY 10543

Subject Number


0007

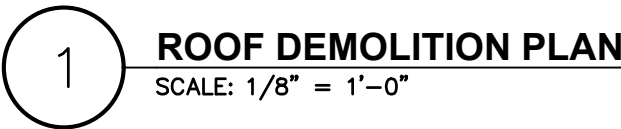
Date _____

3.03.21

ROOF
DEMOLITION
PLAN

SD120

	EXISTING JOISTS AND SHEATHING TO BE INSPECTED FOR DEFICIENCIES SUCH AS, BUT NOT LIMITED, TO WATER OR FIRE DAMAGE. FOR PRICING PURPOSES, ASSUME FULL JOIST AND SHEATHING REPLACEMENT.
	EXISTING FRAMING TO BE REMOVED





Revisions		
No.	Description	Date

LIFE Church, NY

Owner

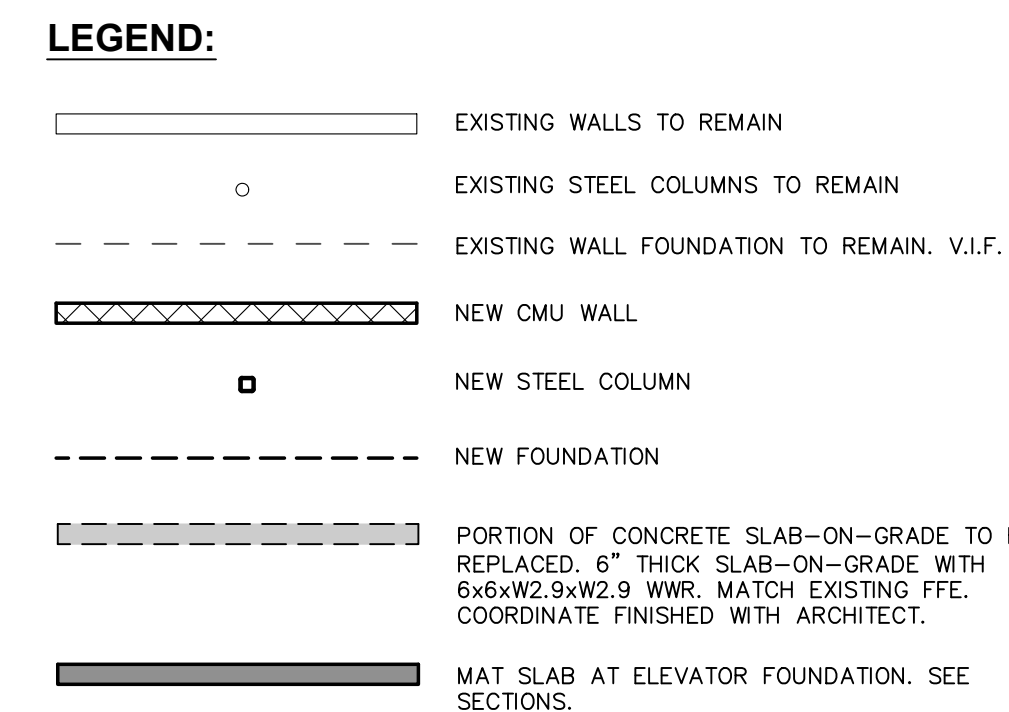
275 Mamaroneck Ave.
Mamaroneck, NY 10543

Project Number
20007
Date

03.03.21

FOUNDATION
PLAN

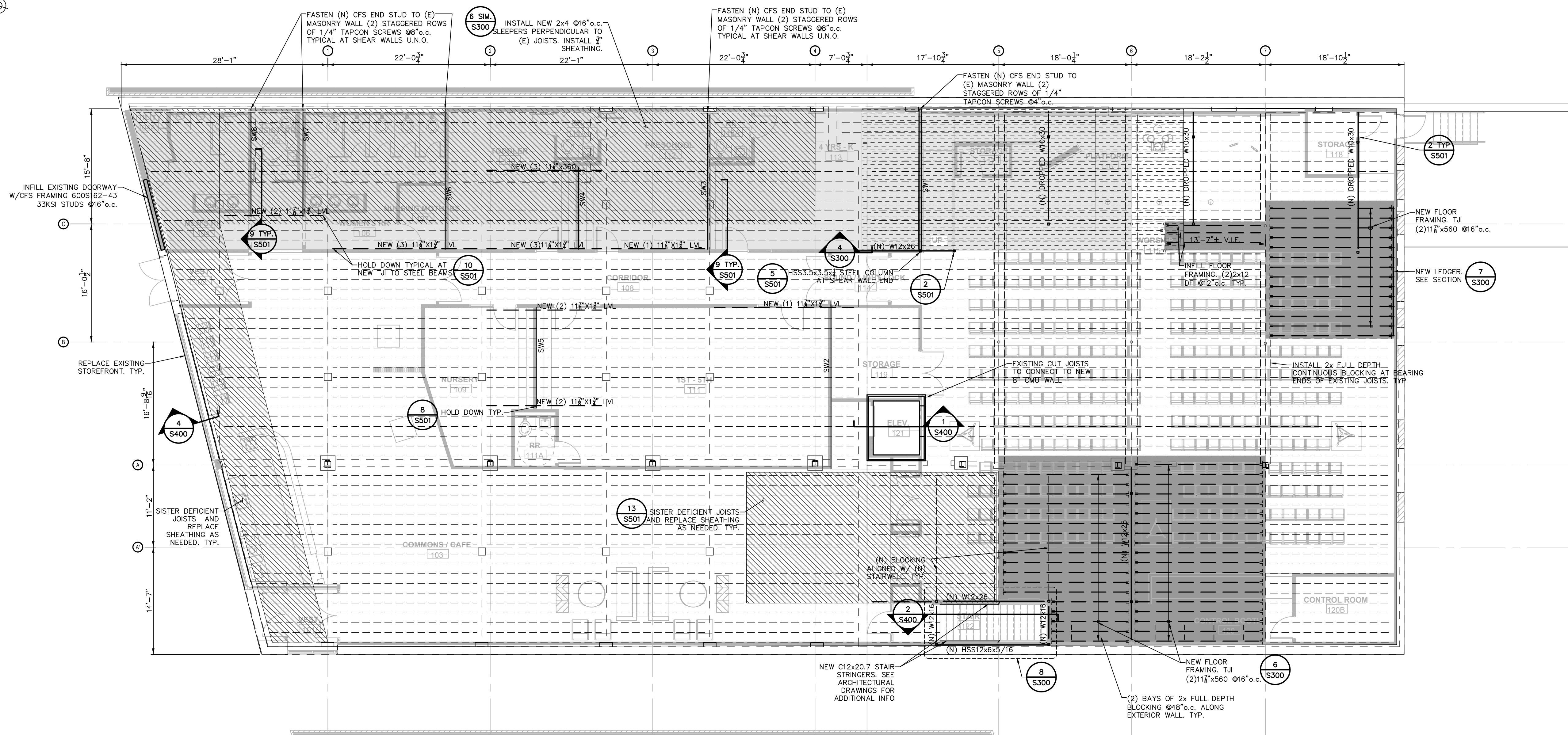
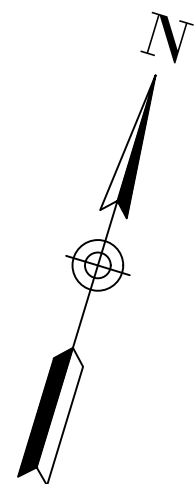
S100



NOTES:

1. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES IN EXISTING MASONRY WALLS. PROVIDE STEEL LINTELS PER SCHEDULE AND DETAIL 6/S500. LINTELS ARE NOT REQUIRED FOR OPENINGS SMALLER THAN 8".

1 FOUNDATION PLAN
SCALE: 1/8" = 1'-0"



1 FLOOR PLAN
SCALE: 1/8" = 1'-0"

LEGEND:

- EXISTING WALLS TO REMAIN
- EXISTING WALLS BELOW TO REMAIN
- EXISTING STEEL COLUMNS BELOW TO REMAIN
- NEW STEEL COLUMNS BELOW
- EXISTING GIRDERS AND BEAMS TO REMAIN
- NEW STEEL GIRDERS
- NEW WOOD JOISTS
- EXISTING JOISTS TO BE SISTERED OR REPLACED AS NEEDED. EXISTING FLOOR SHEATHING TO BE REPLACED AS NEEDED. FOR PRICING PURPOSES, ASSUME 50% OF JOISTS WITHIN HATCHED AREA AREA REQUIRE SISTER JOISTS TO REINFORCE EXCESSIVE NOTCHING AND / OR DAMAGE AND 50% OF SHEATHING REQUIRES REPLACEMENT
- NEW SHEAR WALL. SEE SCHEDULE ON SHEET S002
- NEW 2x4@16" SLEEPERS PERPENDICULAR TO (E) JOISTS BELOW. NEW 3/4" SHEATHING
- REPLACE PORTION OF FLOORING INCLUDING JOISTS, BOTTOM 3/4" SHEATHING, 2x4@16" SLEEPERS PERPENDICULAR TO (N) JOISTS BELOW AND 3/4" TOP SHEATHING
- EXISTING SHEATHING TO BE REMOVED AND REPLACED IN 12' SECTIONS. INSTALL NEW 3/4" TONGUE AND GROOVE PLYWOOD. SEE NOTES FOR FASTENING PATTERN.

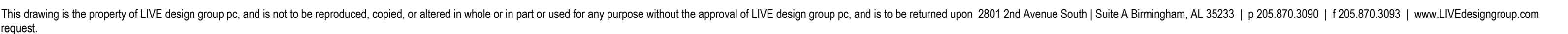
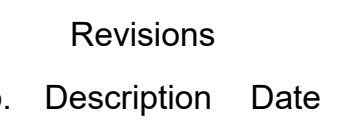
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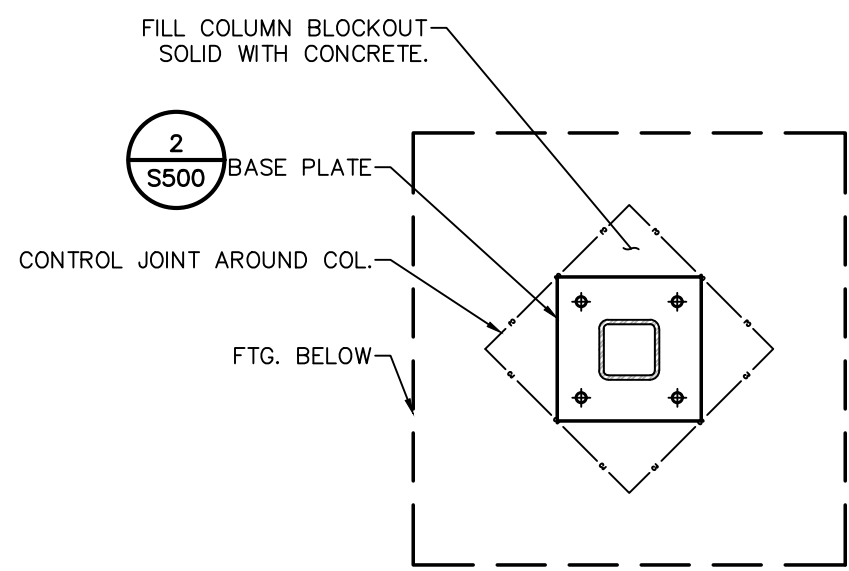
- SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES IN EXISTING MASONRY WALLS. PROVIDE STEEL LINTELS PER SCHEDULE AND DETAIL 6/SS00. LINTELS ARE NOT REQUIRED FOR OPENINGS SMALLER THAN 8".

----- NEW ROOF FRAMING AT NEW MECHANICAL
EQUIPMENT

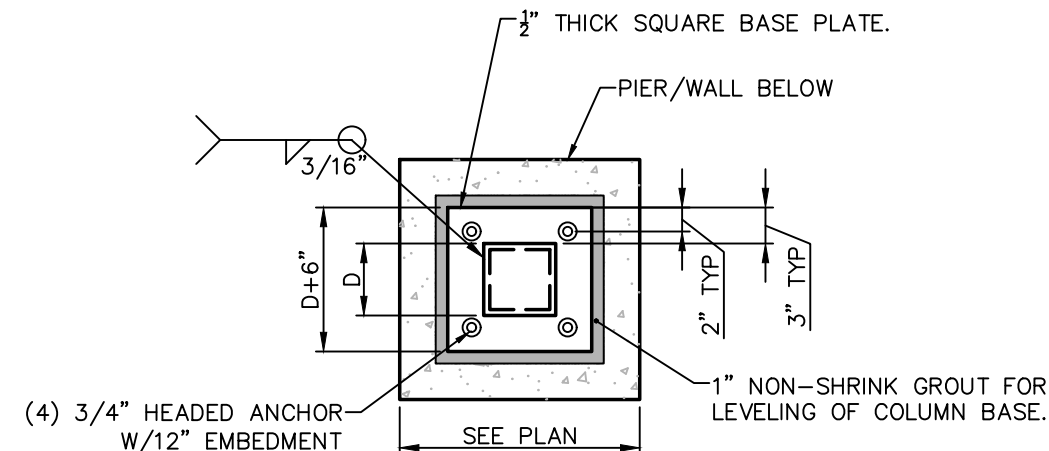


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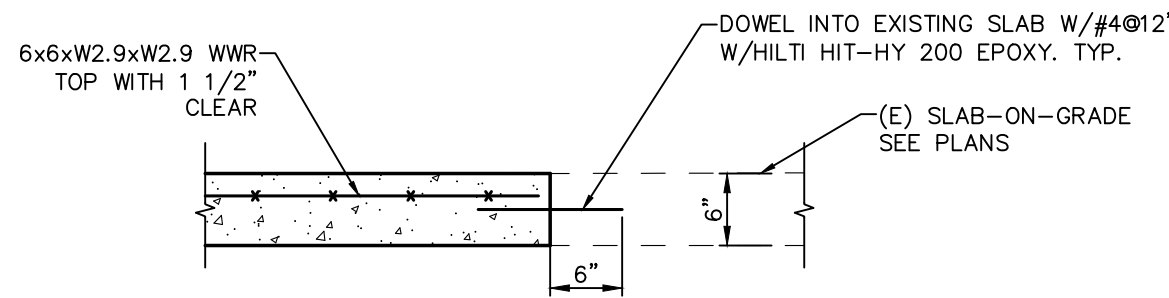




1 **TYP. COLUMN BLOCKOUT DETAIL**
SCALE: 3/4" = 1'-0"



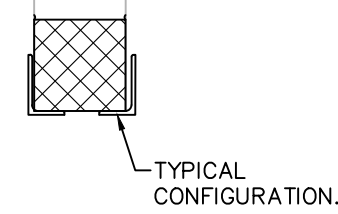
2 **TYP. SQUARE BASEPLATE**
SCALE: 3/4" = 1'-0"



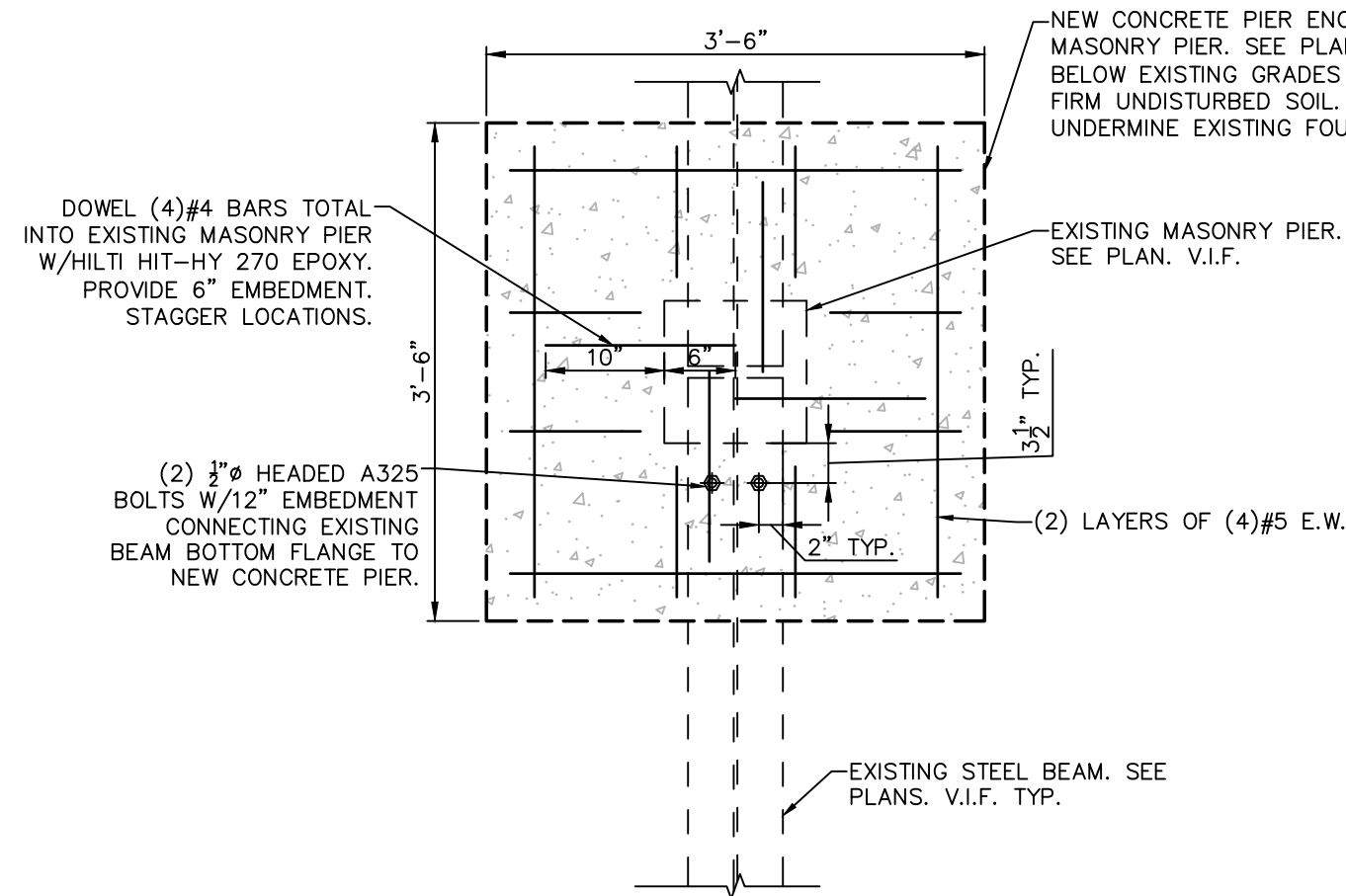
3 **TYP. NEW TO EXISTING SLAB**
SCALE: 3/4" = 1'-0"

STEEL LINTEL SCHEDULE		
WALL THICKNESS & TYPE	WIDTH OF MASONRY OPENING	
	4'-0" MAX. OPENING	4'-0" TO 8'-0" OPENING
	4" MIN. BRIDGING EACH END	8" MIN. BRIDGING EACH END
EXISTING 12" MASONRY WALL	2L6x6x8	2L6x6x8 LLV
EXISTING 8" MASONRY WALL	2L4x3x8 LLV	2L6x3x8 LLV

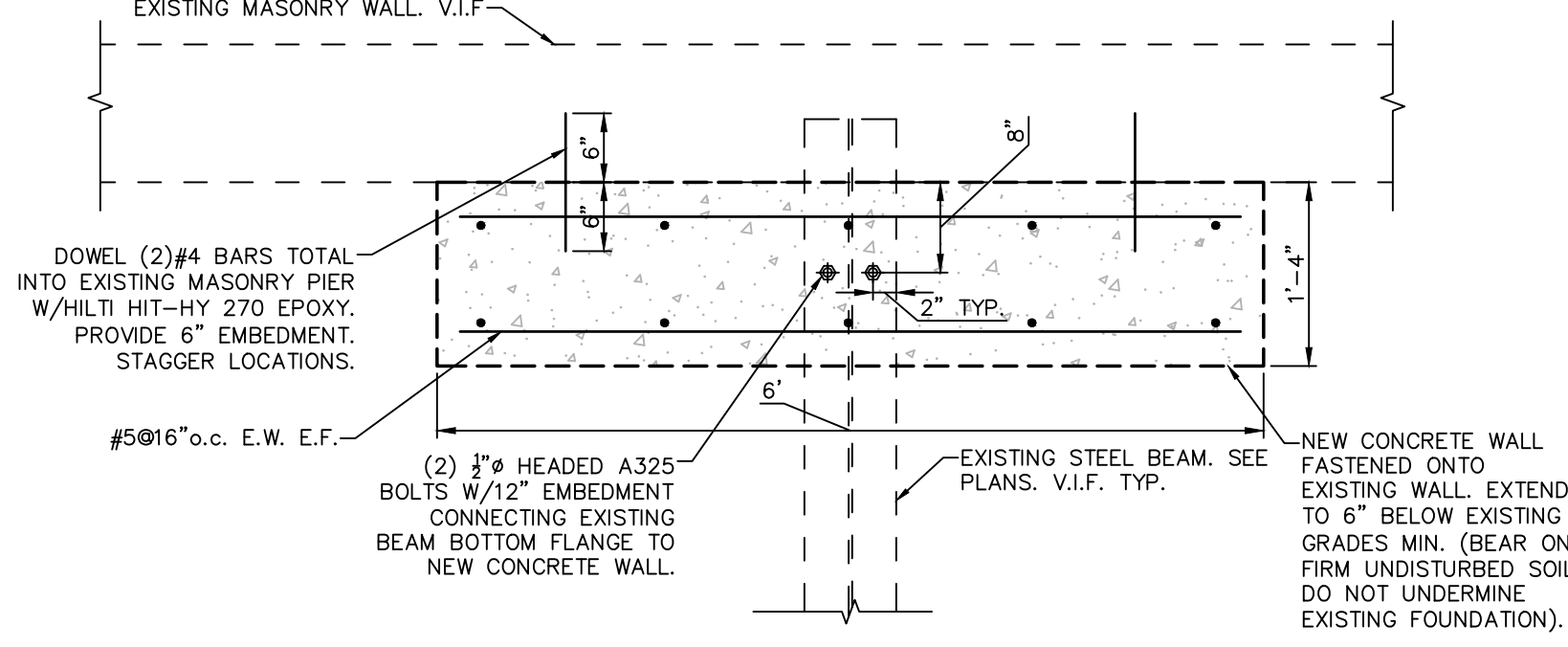
NOTES:
1. ALL LINTELS SHALL BEAR ON 8" OF SOLID MASONRY.
2. NOTIFY ENGINEER IF EXISTING MASONRY IS NOT SOLID OR FULLY GROUTED.
3. CONTRACTOR RESPONSIBLE FOR TEMPORARILY SUPPORTING EXISTING CONSTRUCTION WHEN INSTALLING NEW LINTELS. SEE TYPICAL NOTES.



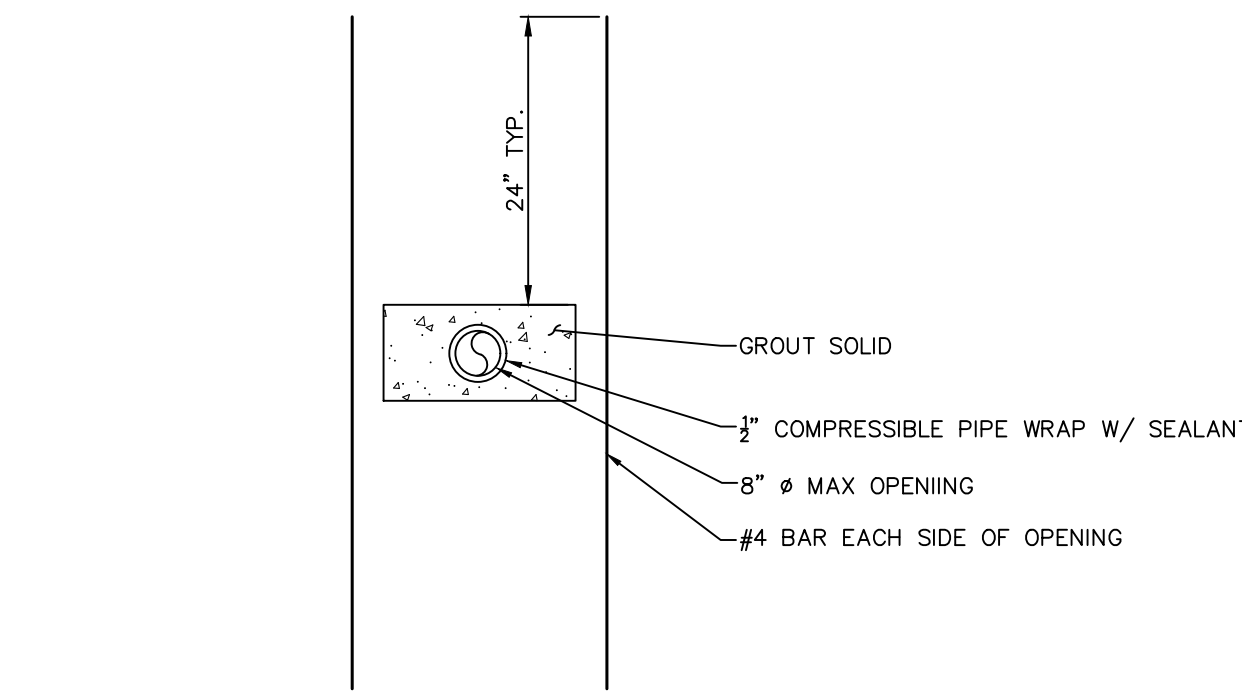
6 **LOOSE STEEL LINTEL DETAILS**
SCALE: N.T.S.



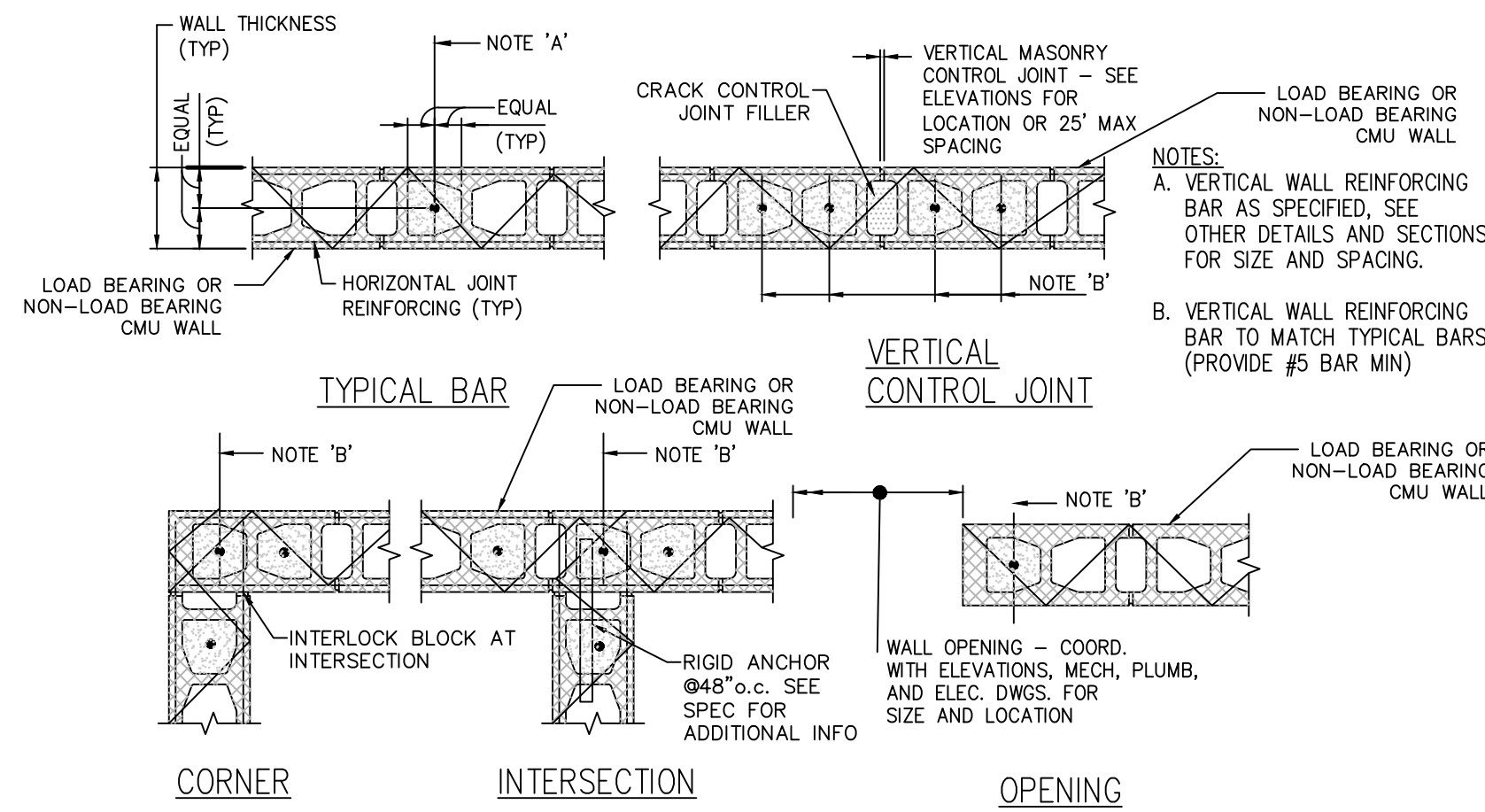
4 **(E) BEAM TO NEW CONCRETE PIER PLAN VIEW**
SCALE: 3/4"=1'-0"



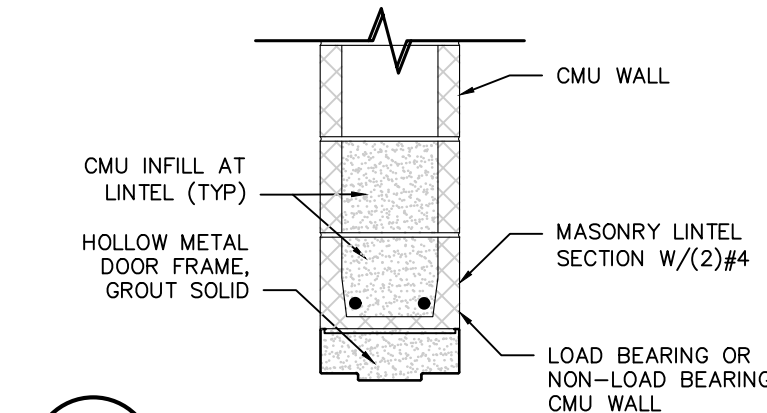
5 **(E) BEAM TO NEW CONCRETE WALL PLAN VIEW**
SCALE: 3/4"=1'-0"



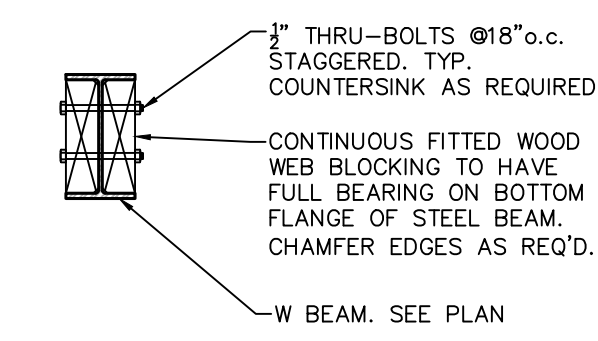
A **TYPICAL NEW CMU WALL PENETRATION DETAIL**
SCALE: 3/4" = 1'-0"



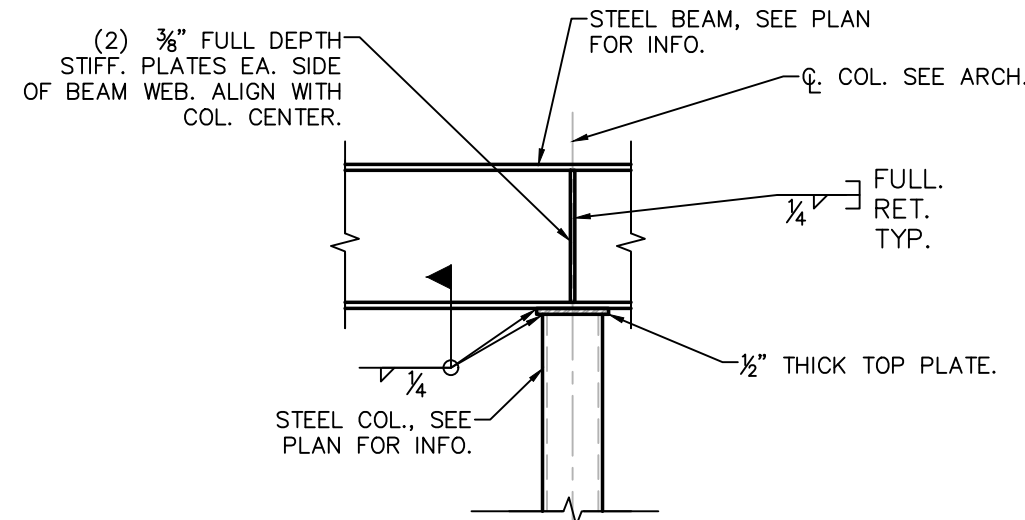
B **TYPICAL CONCRETE MASONRY VERTICAL WALL REINFORCING DETAILS**
SCALE: N.T.S.



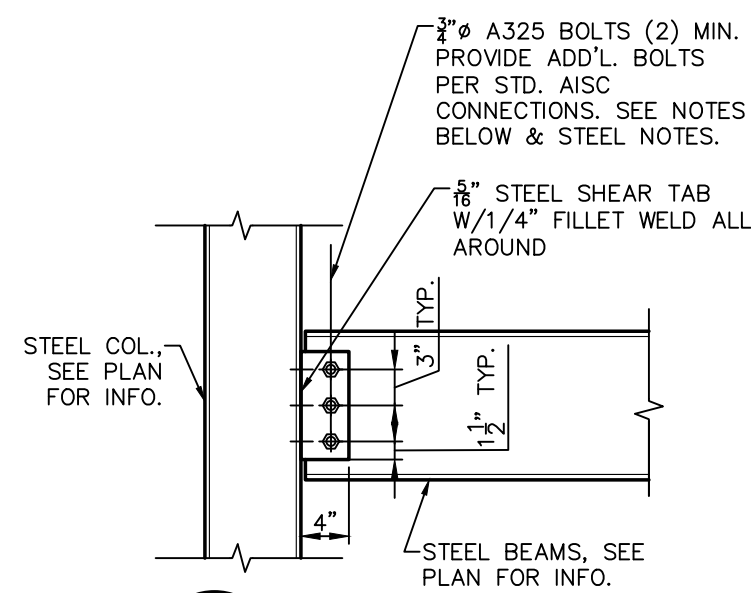
C **TYPICAL CMU LINTEL**
SCALE: 3/4" = 1'-0"



1 WEB BLOCKING DETAIL
SCALE: 3/4" = 1'-0"

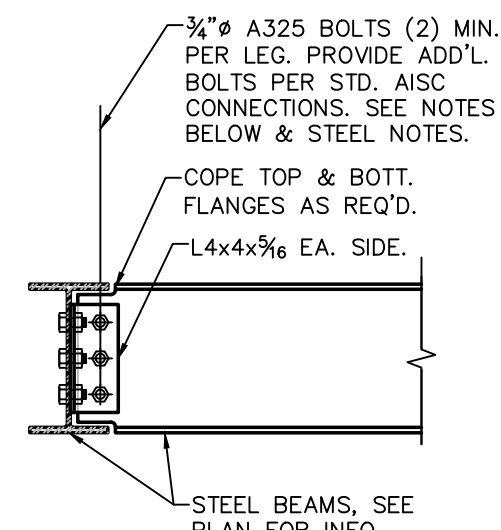


2 TYP. CONN. DETAIL @ TOP OF COL.
SCALE: 3/4" = 1'-0"

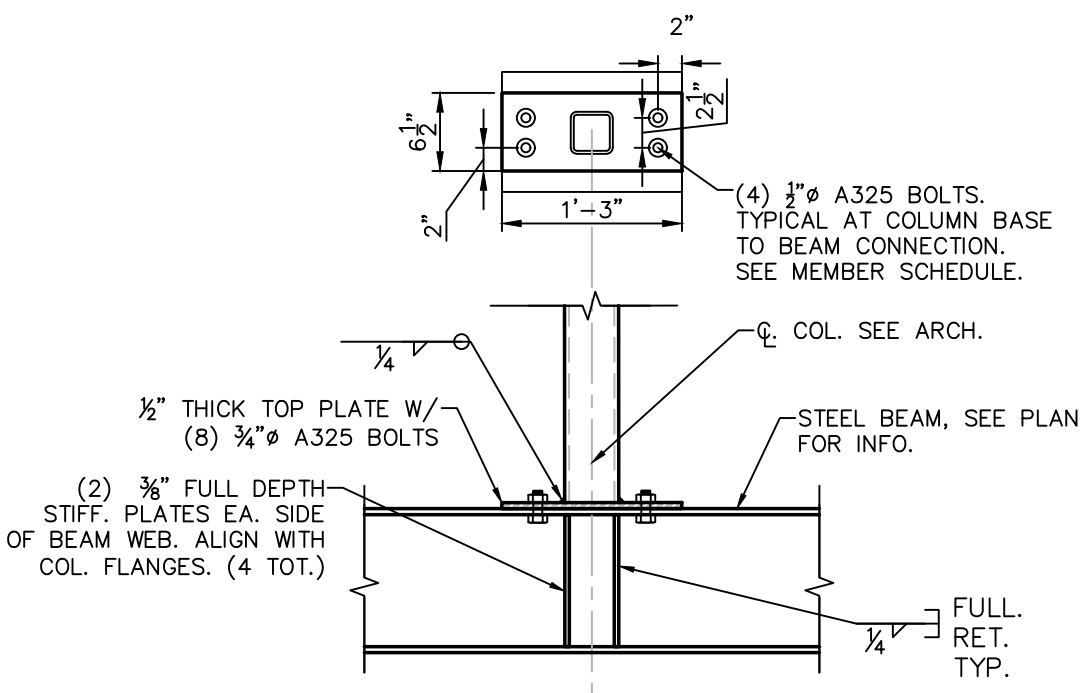


3 TYP. BEAM TO COL CONN. DETAIL
SCALE: 3/4" = 1'-0"

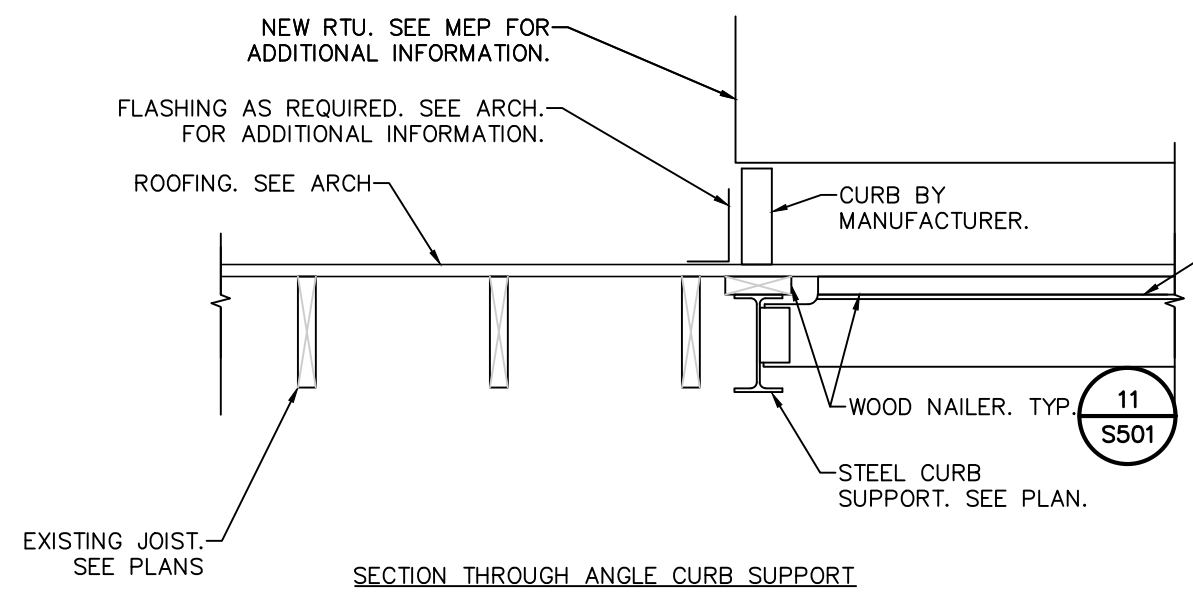
NOTES:
1. PROVIDE (2) BOLTS MIN. FOR BEAMS 8" DEEP OR LESS.
2. PROVIDE (3) BOLTS MIN. FOR BEAMS 10" TO 12" DEEP.
3. PROVIDE (4) BOLTS MIN. FOR BEAMS 14" TO 16" DEEP.
4. PROVIDE (5) BOLTS MIN. FOR BEAMS 18" TO 24" DEEP.
5. IF BOLTING IS NOT FEASIBLE, PROVIDE FILLET WELD ALL AROUND.
6. AS AN ALTERNATE, PROVIDE 1/4" FILLET WELD ALL AROUND ON ONE OR BOTH OF THE BEAMS.



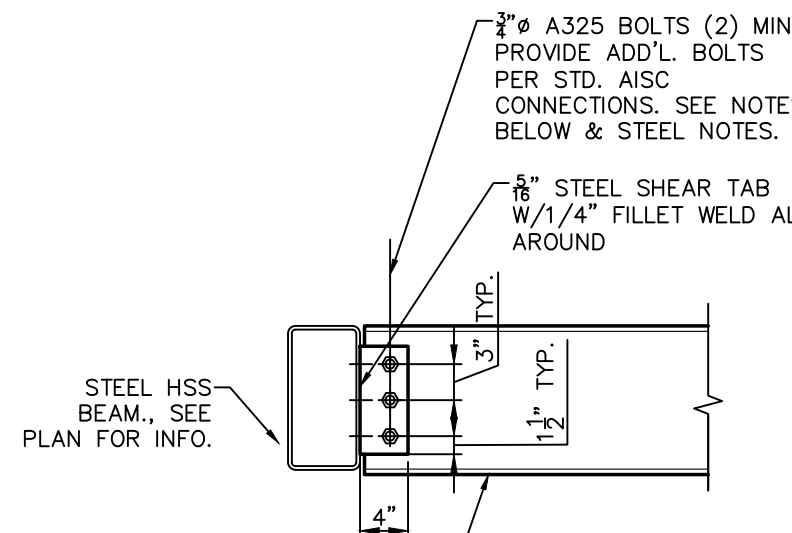
4 TYP. BEAM TO BEAM CONN. DETAIL
SCALE: 3/4" = 1'-0"



5 TYP. COLUMN BASE TO BEAM CONNECTION
SCALE: 3/4" = 1'-0"

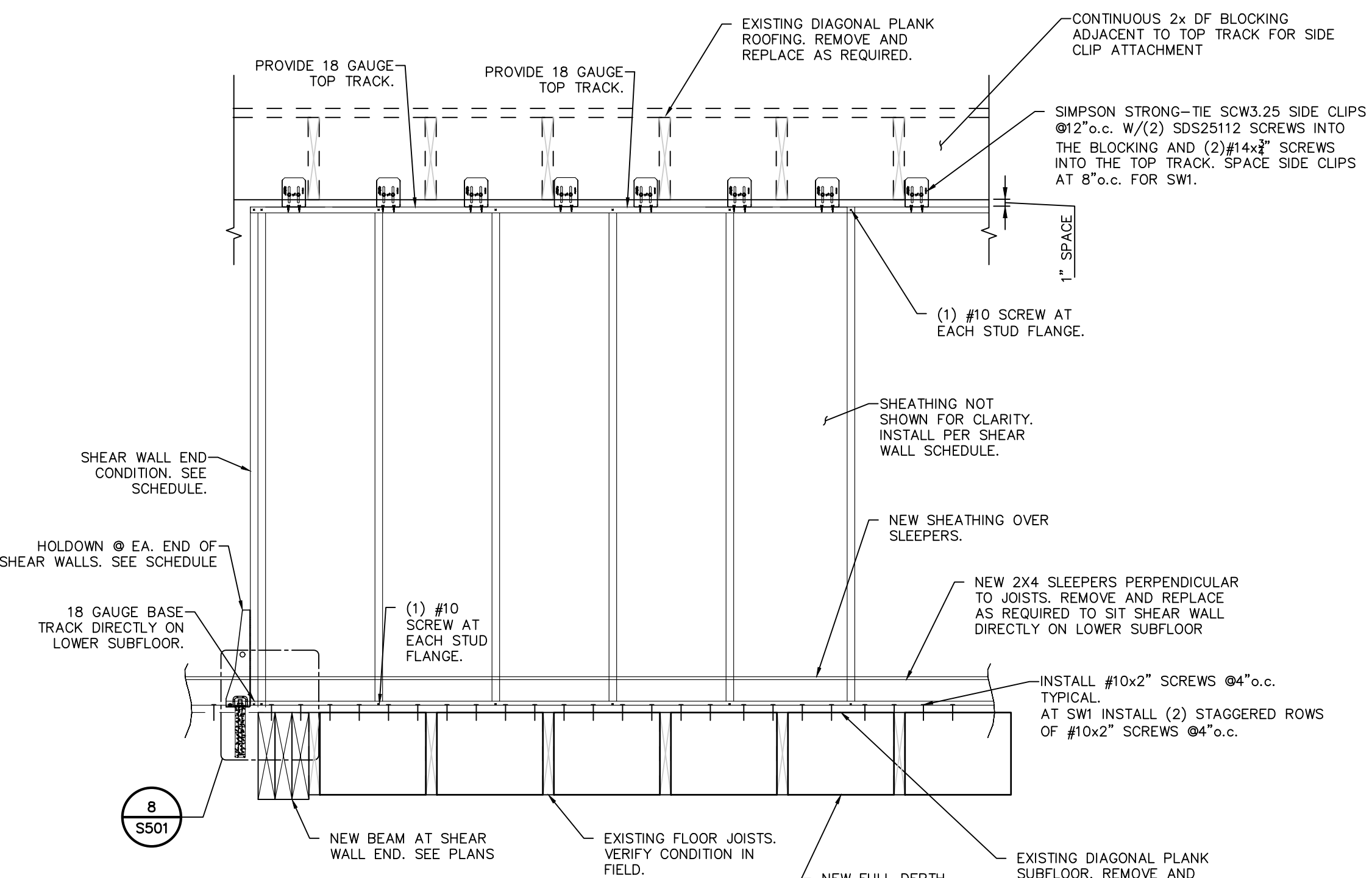


6 SECTION AT ROOF-TOP-UNIT CURB
SCALE: 3/4" = 1'-0"

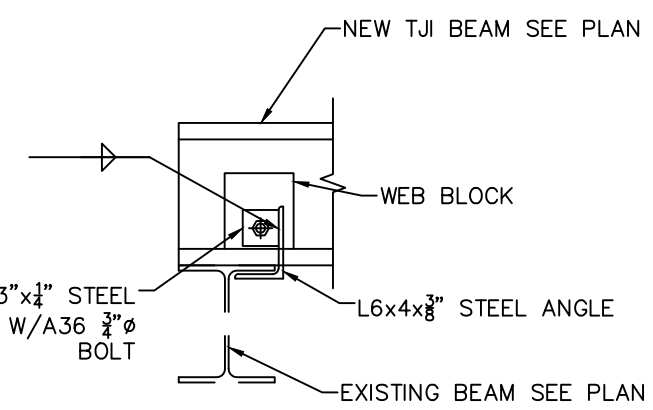


7 TYP. BEAM TO HSS BEAM CONN. DETAIL
SCALE: 3/4" = 1'-0"

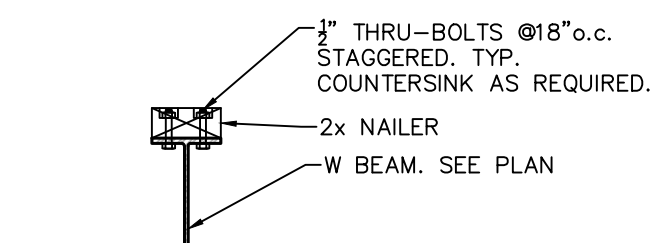
NOTES:
1. PROVIDE (2) BOLTS MIN. FOR BEAMS 8" DEEP OR LESS.
2. PROVIDE (3) BOLTS MIN. FOR BEAMS 10" TO 12" DEEP.
3. PROVIDE (4) BOLTS MIN. FOR BEAMS 14" TO 16" DEEP.
4. PROVIDE (5) BOLTS MIN. FOR BEAMS 18" TO 24" DEEP.
5. IF BOLTING IS NOT FEASIBLE, PROVIDE FILLET WELD ALL AROUND.
6. AS AN ALTERNATE, PROVIDE 1/4" FILLET WELD ALL AROUND ON ONE OR BOTH OF THE BEAMS.



9 TYPICAL COLD FORM METAL SHEAR WALL ELEV.
SCALE: NOT TO SCALE

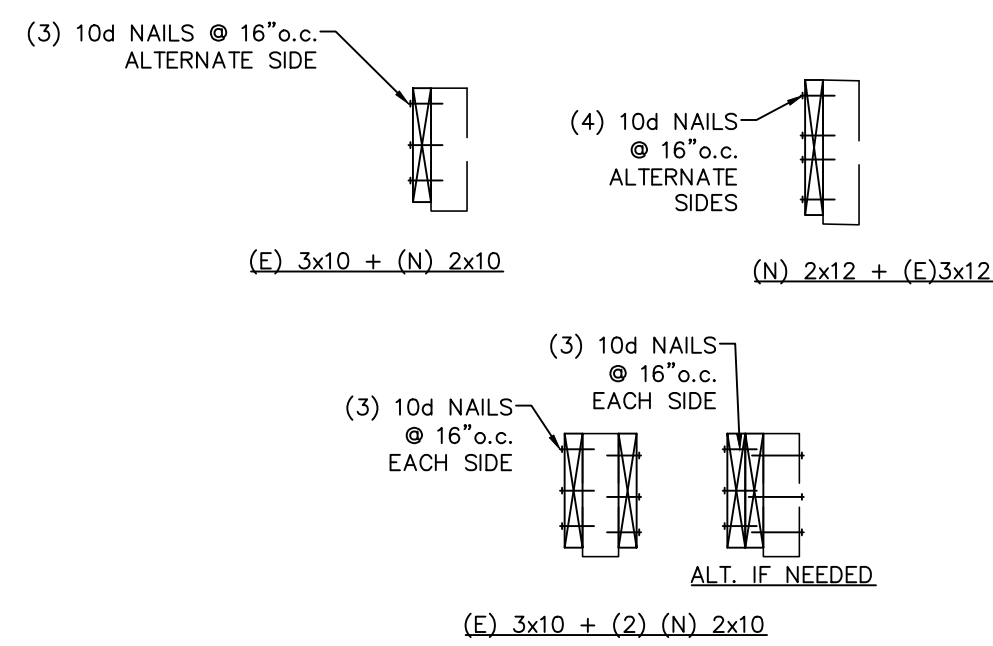
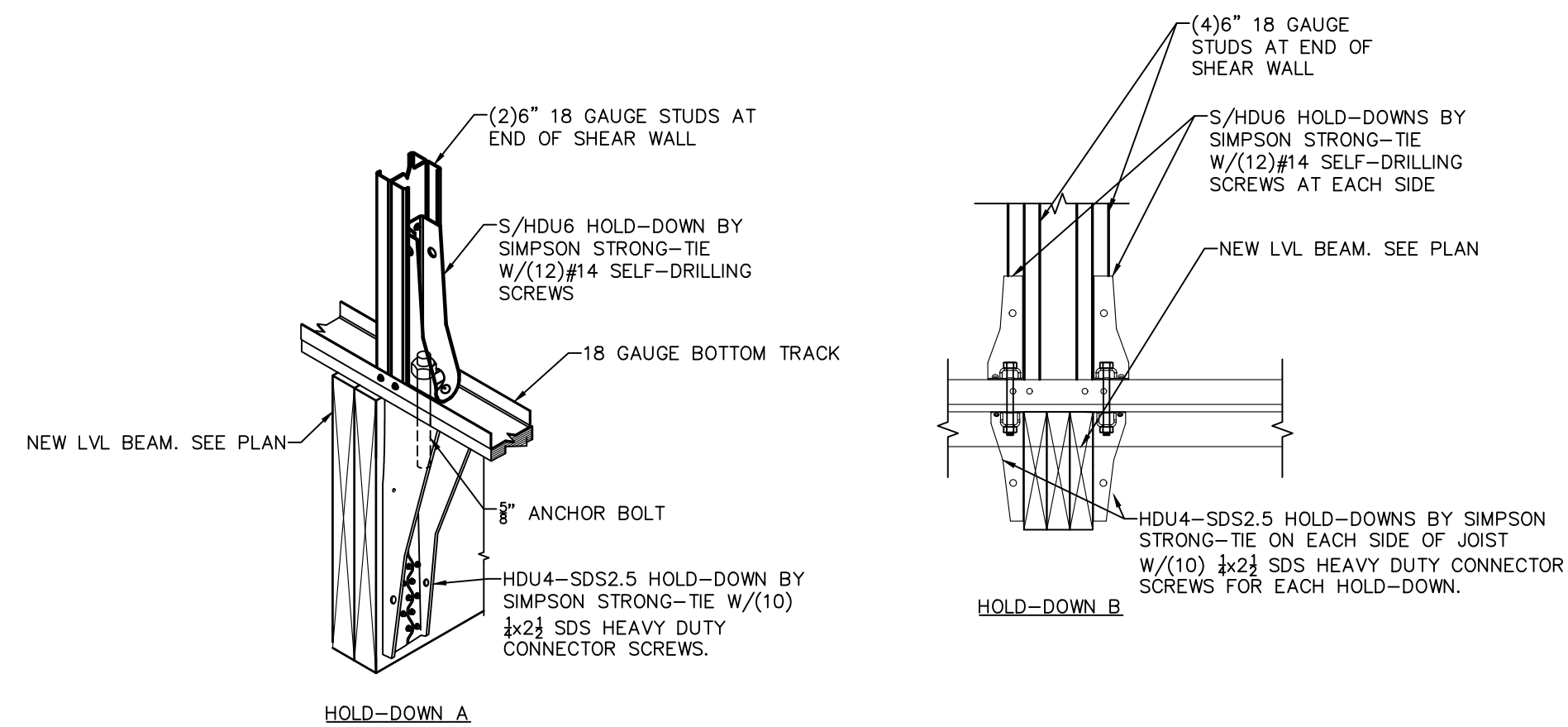


10 TYPICAL JOIST TO BEAM HOLD-DOWN DETAIL
SCALE: 3/4"=1'-0"

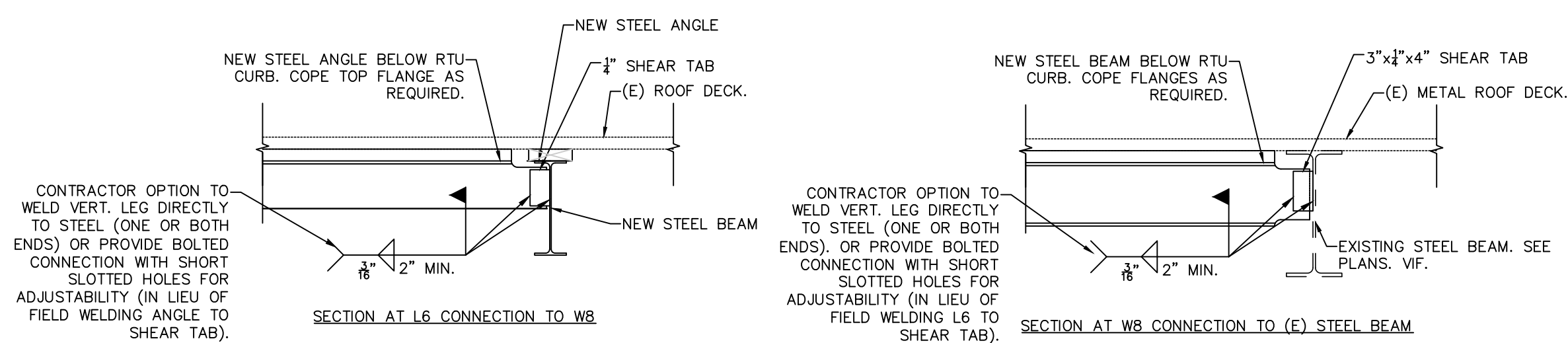


11 WOOD NAILER DETAIL
SCALE: 3/4" = 1'-0"

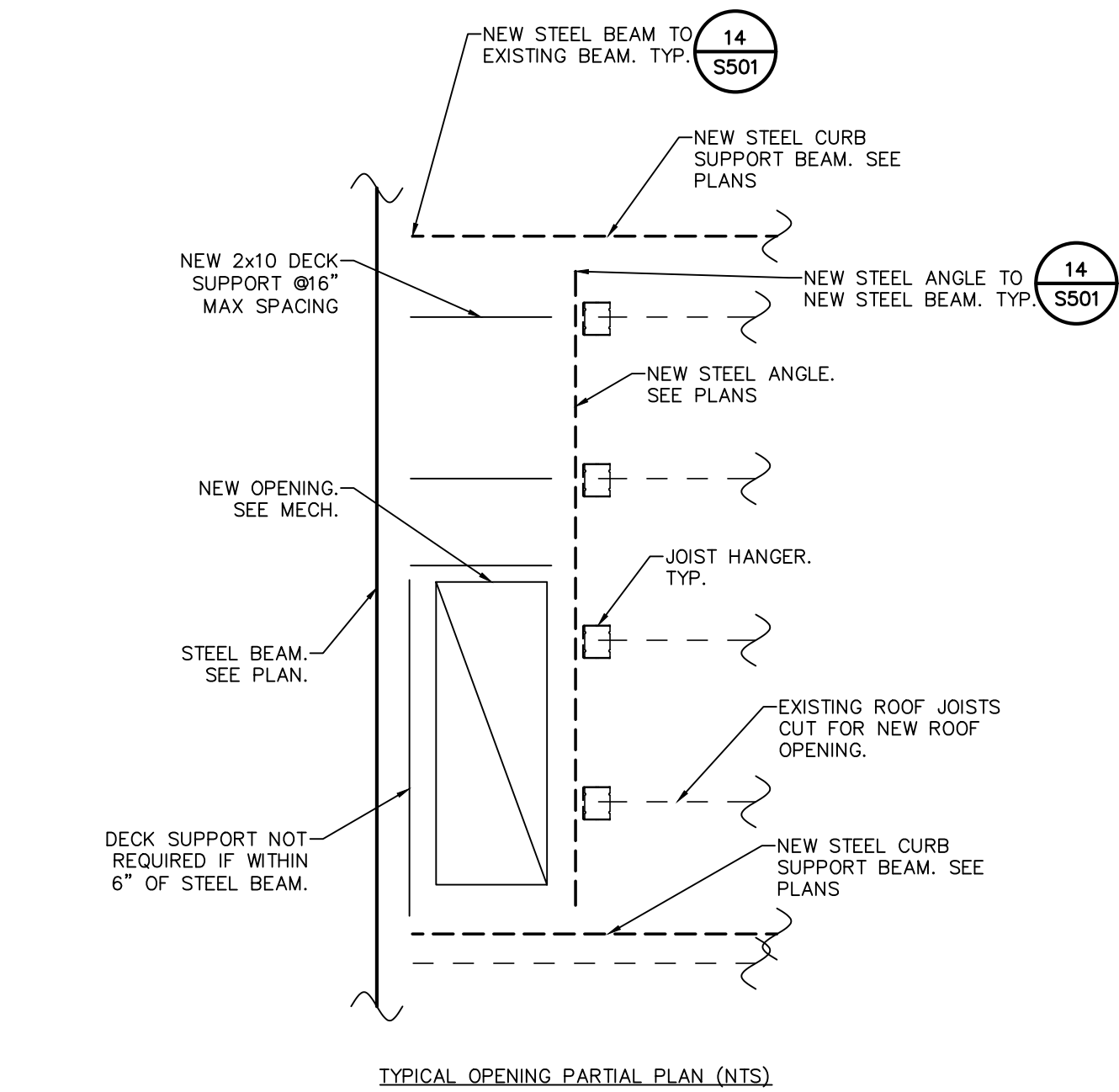
8 TYPICAL SHEARWALL HOLD-DOWN DETAIL
SCALE: NOT TO SCALE



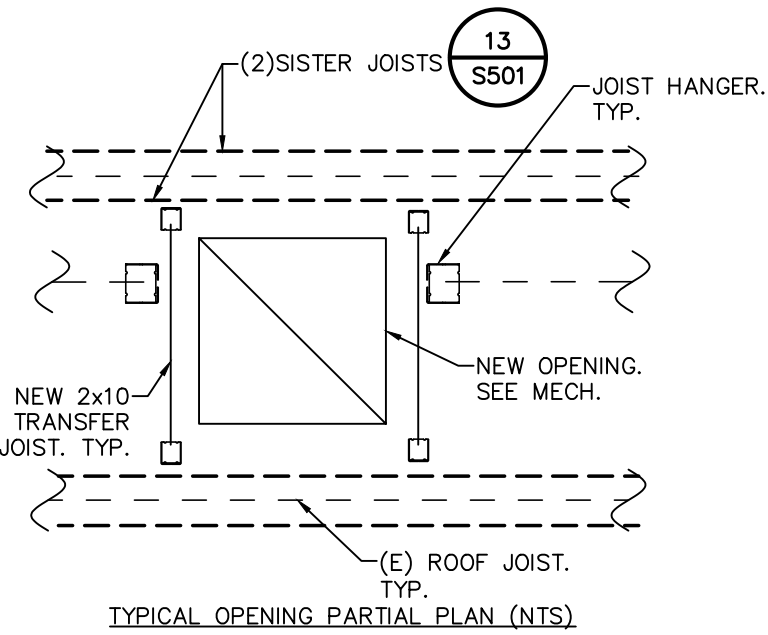
13 TYPICAL JOIST SISTERING DETAIL
SCALE: 3/4" = 1'-0"



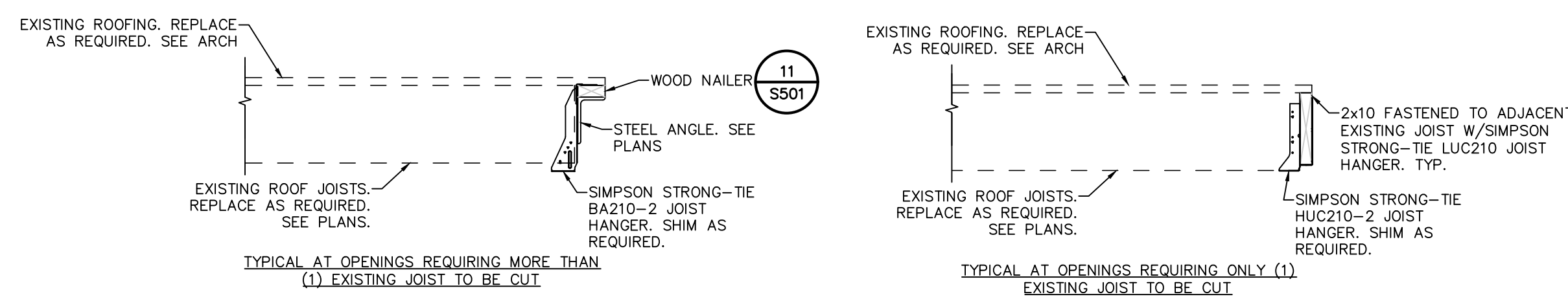
14 TYPICAL CURB SUPPORT CONNECTION DETAILS
SCALE: 3/4" = 1'-0"



TYPICAL OPENING PARTIAL PLAN (NTS)



TYPICAL OPENING PARTIAL PLAN (NTS)

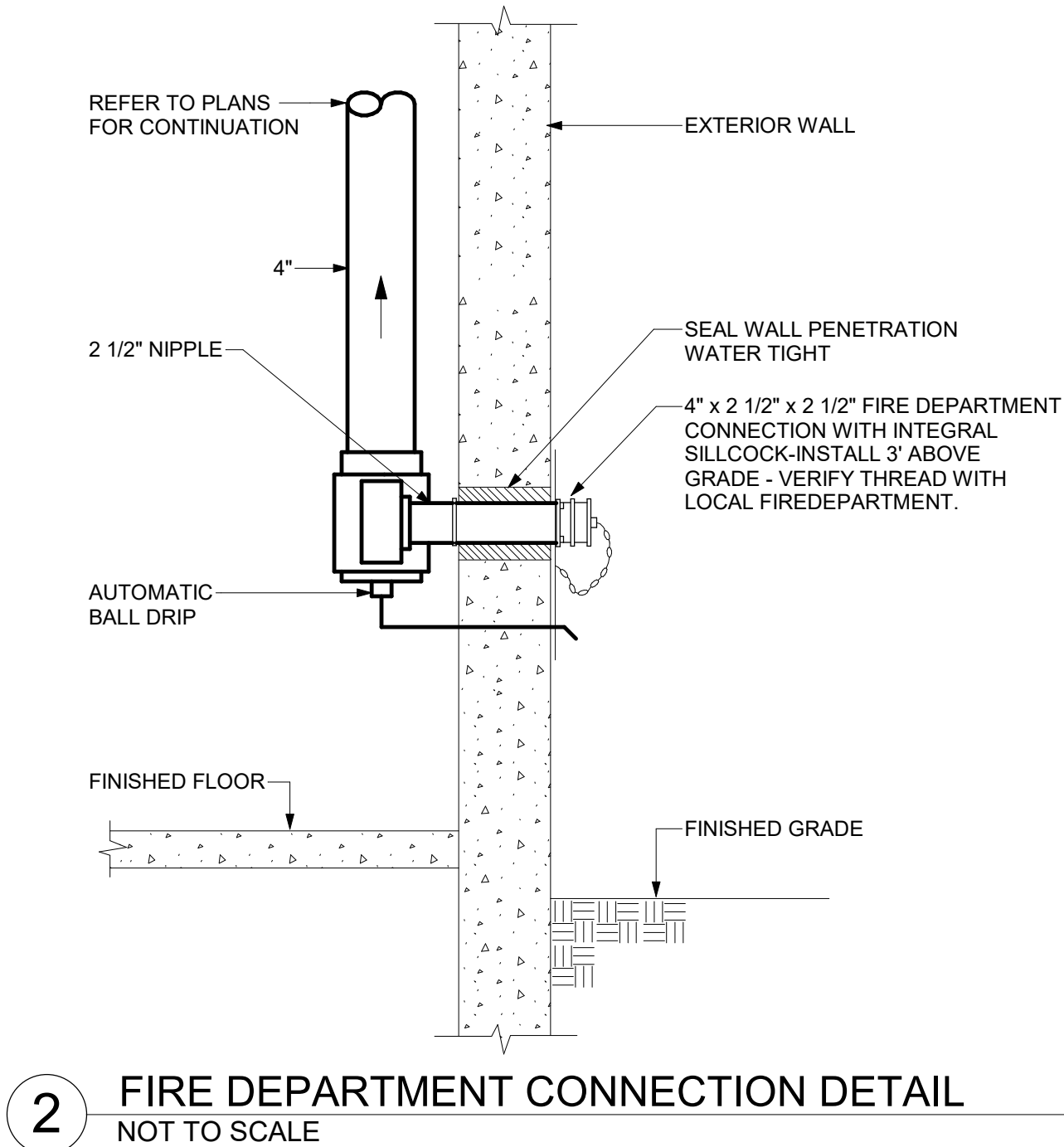
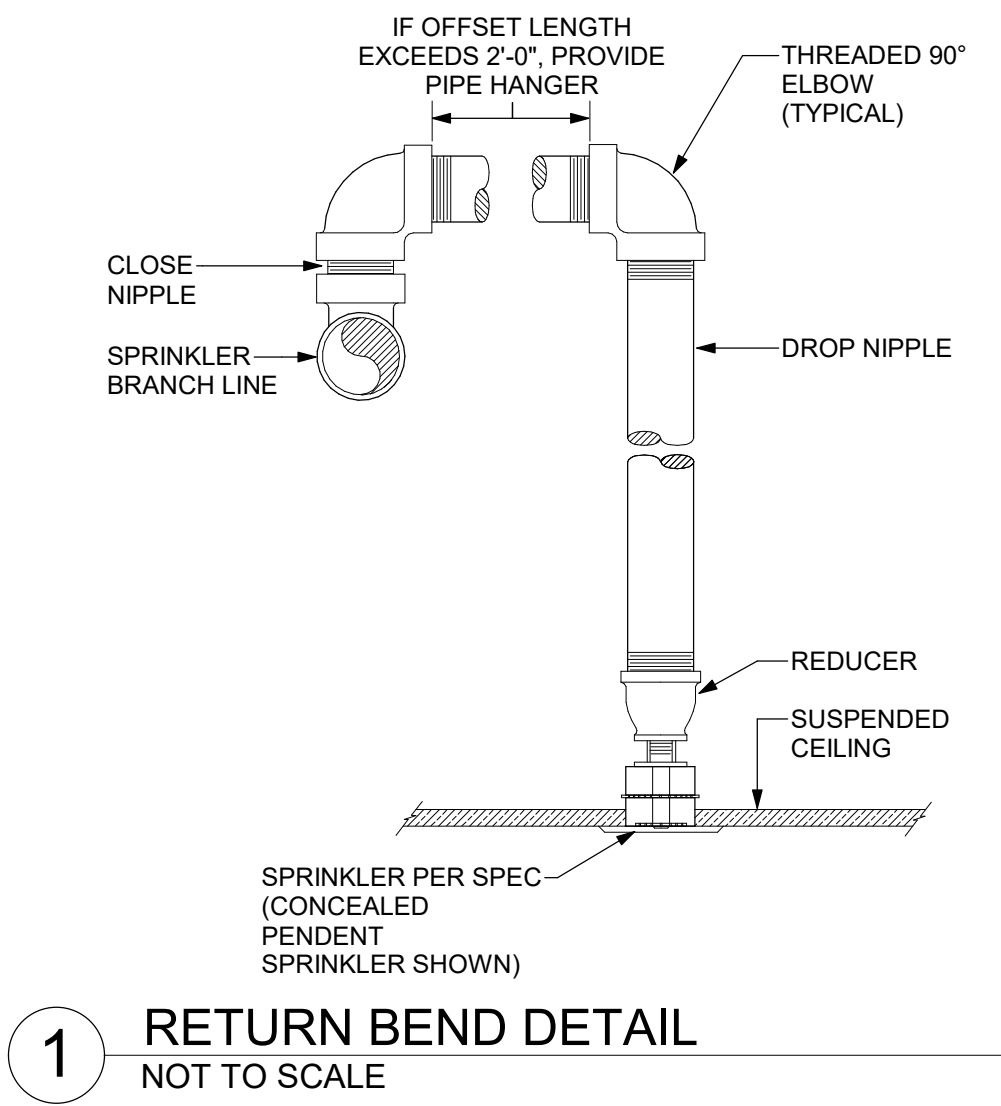


12 TYPICAL ROOF DECK DUCT OPENING
SCALE: NOT TO SCALE

FIRE PROTECTION GENERAL NOTES	
#	General Note
A	THE WORK COVERED CONSISTS OF FURNISHING ALL LABOR AND MATERIAL NECESSARY TO INSTALL, COMPLETE AND MAKE READY FOR CONTINUOUS OPERATION OF THE FIRE PROTECTION SYSTEM, APPARATUS AND EQUIPMENT FOR THIS PROJECT, AS SHOWN ON THESE DRAWINGS, AND INCLUDED IN THE PROJECT SPECIFICATIONS.
B	THIS PROJECT IS "DESIGN BUILD". THESE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO INDICATE MINIMUM WORK AND MINIMUM STANDARDS FOR EQUIPMENT, MATERIALS AND PROCEDURES.
C	ANY AND ALL PERMITS REQUIRED FOR INSTALLATION OF ANY MATERIAL SHALL BE OBTAINED BY THE SPRINKLER CONTRACTOR AS PART OF THE WORK, INCLUDING ALL FEES OR EXPENSES INCURRED.
D	ROUTING OF SPRINKLER MAINS, BRANCHLINES AND SPRINKLERS SHALL BE THOROUGHLY COORDINATED BY THE SPRINKLER CONTRACTOR WITH OTHER TRADES AND BUILDING STRUCTURES PRIOR TO SUBMISSION OF COORDINATED SHOP DRAWINGS, ORDERING OF FABRICATED PIPING AND INSTALLATION.
E	THE SPRINKLER CONTRACTOR SHALL PERFORM A NEW HYDRANT FLOW TEST AND SHALL BASE THE HYDRAULIC CALCULATIONS ON THESE RESULTS.
F	PRESSURE TEST ALL NEW PIPING AND ALARMS PER NFPA 13 2017 ED. COMPLETE AND FILE ALL REPORTS AND CERTIFICATIONS REQUIRED. SUBMIT TO OWNER COPIES OF ALL REPORTS AND CERTIFICATIONS, TOGETHER WITH A COPY OF NFPA 25 2015 ED.
G	ALL SPRINKLER SYSTEM PIPING IS TO BE CONCEALED ABOVE CEILINGS UNLESS OTHERWISE NOTED.
H	SPRINKLER INSTALLED IN AREAS WITH NO FINISHED CEILING SHALL BE LOCATED AS HIGH AS POSSIBLE. SPRINKLERS SUBJECT TO PHYSICAL DAMAGE, OR WITH A DEFLECTOR ELEVATION OF 7'-6" AFF OR LESS, SHALL BE INSTALLED WITH APPROVED AND LISTED SPRINKLER GUARDS.
I	WHERE SPRINKLER PIPING IS TO BE LEFT EXPOSED, THE SPRINKLER CONTRACTOR CLEAN PIPING AND MAKE READY FOR PAINTING.
J	THE SPRINKLER CONTRACTOR SHALL PROVIDE SPRINKLER PROTECTION UNDER ALL MECHANICAL DUCTWORK OR OTHER OBSTRUCTION IN EXCESS OF 4" IN WIDTH, IN EXPOSED STRUCTURE AREAS, IN ACCORDANCE WITH NFPA 13 2015 ED.
K	ALL PIPING THROUGH CONCRETE FLOORS AND FIRE RATED WALLS OR PARTITIONS SHALL BE PROVIDED WITH SLEEVE AND FIRE STOPPING WITH UL RATED ASSEMBLIES OF EQUAL FIRE RATING.
L	THE FIRE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, STORAGE AND CUTTING OF ANY CEILING TILES TO ACCOMMODATE SPRINKLERS AND PIPING. THE SPRINKLER CONTRACTOR SHALL ALSO REINSTALL THE CEILING TILES UPON COMPLETION OF THE WORK AND REPLACE ANY DAMAGED TILES.
M	THE SPRINKLER CONTRACTOR SHALL DELIVER MATERIAL TO THE JOB, UNLOAD AND STORE MATERIALS IN A LOCATION AS DETERMINED BY THE OWNERS REPRESENTATIVE.
N	THE SPRINKLER CONTRACTOR SHALL MAINTAIN THE WORK PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL OR REFUSED COVERED BY THIS WORK. AT THE COMPLETION OF THE WORK, REMOVE ALL SURPLUS MATERIALS, TOOLS, ECT. AND LEAVE THE PREMISES CLEAN.
O	THESE SPRINKLER DRAWINGS ARE DIAGRAMATIC AND SHOWN AS A REPRESENTATIVE DESIGN ONLY. THE CONTRACTOR SHALL VISIT THE SITE, READ ALL DRAWINGS, AND MAKE DETAILED NOTES OF NECESSARY OFFSETS REQUIRED FOR INSTALLATION OF THE WORK.
P	THE CONTRACTOR SHALL INSTALL A SINGLE AIR VENT WITH A MINIMUM 1/2" CONNECTION, AUTOMATIC, LOCATED NEAR THE FURETHEST HIGH POINT OF THE SYSTEM.

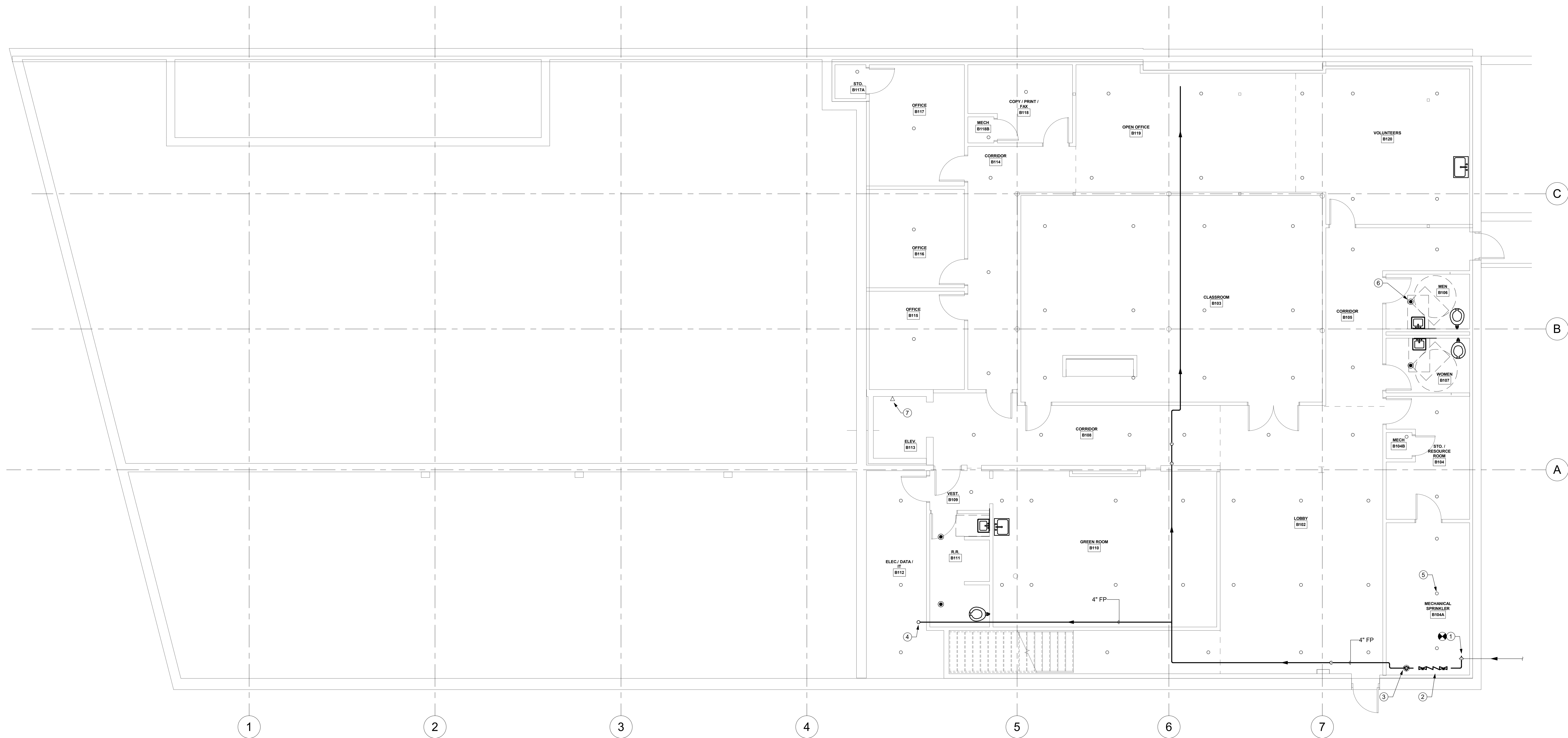
SPRINKLER HYDRAULIC DESIGN SCHEDULE								
SPACE	HAZARD CLASS	GROUP	DENSITY (GPM/S.F.)	AREA*	DESIGN ADJUSTMENT	SYSTEM	MAX./AREA SPRINKLER	HOSE DEMAND
OFFICE, TOILET ROOMS, PATIENT ROOMS, CORRIDORS AND WAITING.	LIGHT	N/A	0.10	1,500 SQ.FT.	NONE	WET	225 SQ.FT.	100 GPM
STORAGE, MECHANICAL, ELECTRIC, DATA, ECT.	ORDINARY	1	0.15	1,500 SQ.FT.	NONE	WET	130 SQ.FT.	250 GPM

FIRE PROTECTION SYMBOL LIST	
SYMBOL	DESCRIPTION
---	EXISTING WORK TO BE REMOVED
●	POINT OF CONNECTION
✕	POINT OF DISCONNECTION
NTS	NOT TO SCALE
(E)	EXISTING
(ETR)	EXISTING TO REMAIN
AFF	ABOVE FINISHED FLOOR
GC	GENERAL CONTRACTOR
MC	MECHANICAL CONTRACTOR
PC	PLUMBING CONTRACTOR
EC	ELECTRICAL CONTRACTOR
FC	FLUSHING CONNECTION
---	EXISTING PIPING
---	NEW PIPING
---	FIRE PROTECTION SERVICE (FP)
---	SPRINKLER MAIN/BRANCH PIPING (S)
---	SPRINKLER DRAIN PIPING (D)
---	ELBOW DOWN
---	45°OFFSET
---	ELBOW UP
---	BOTTOMTEE CONNECTION
---	TOP TEE CONNECTION
---	PIPE CONTINUATION
---	FLUSHING CONNECTION
○	STANDARD SPRAY QUICK RESPONSE UPRIGHT SPRINKLER
○	SEMI RECESSED PENDENT SPRINKLER HEAD
●	DRAIN VALVE
---	CHECK VALVE
---	RELIEF VALVE
---	BACKFLOW PREVENTER (BFP)
---	SHUT-OFF VALVE WITH TAMPER SWITCH (TS)
---	ALARM CHECK VALVE WITH TRIM (ACV)
---	WATER MOTOR GONG
---	FIRE DEPARTMENT CONNECTION (FDC)



FP1.01 DRAWING NOTES

- 1 CONNECT TO EXISTING 4" FIRE SERVICE MAIN
- 2 4" DOUBLE CHECK DETECTOR BACKFLOW PREVENTER ASSEMBLY
- 3 4" ALARM CHECK VALVE WITH TRIM
- 4 4" SPRINKLER MAIN UP
- 5 TYPICAL UPRIGHT SPRINKLER (HIGH TEMP IN MECHANICAL ROOMS)
- 6 TYPICAL SEMI RECESSED PENDENT SPRINKLER
- 7 SIDEWALL SPRINKLER IN ELEVATOR PIT. COORDIANTE TEMPERATURE RATING AND HEAT DETECTOR RESPONSE TIME WITH ELECTRICAL CONTRACTOR.



1 BASEMENT LEVEL FIRE PROTECTION PLAN

3/16" = 1'-0"

FP1.11 DRAWING NOTES

- 1 FIRE SPRINKLER MAIN DOWN
2 FIRE DEPARTMENT CONNECTION (4" X 2-1/2" X 2-1/2")
3 TYPICAL UPRIGHT SPRINKLER (HIGH TEMP IN MECHANICAL ROOMS)
4 TYPICAL SEMI RECESSED PENDENT SPRINKLER
5 ELECTRIC ALARM BELL
6 DRY TYPE PENDENT SPRINKLER IN VESTIBULES



LIFE Church, NY
275 Mamaroneck Ave. Mamaroneck, NY 10543
03.03.21

Revisions
No. Description Date

LIFE Church, NY

Owner

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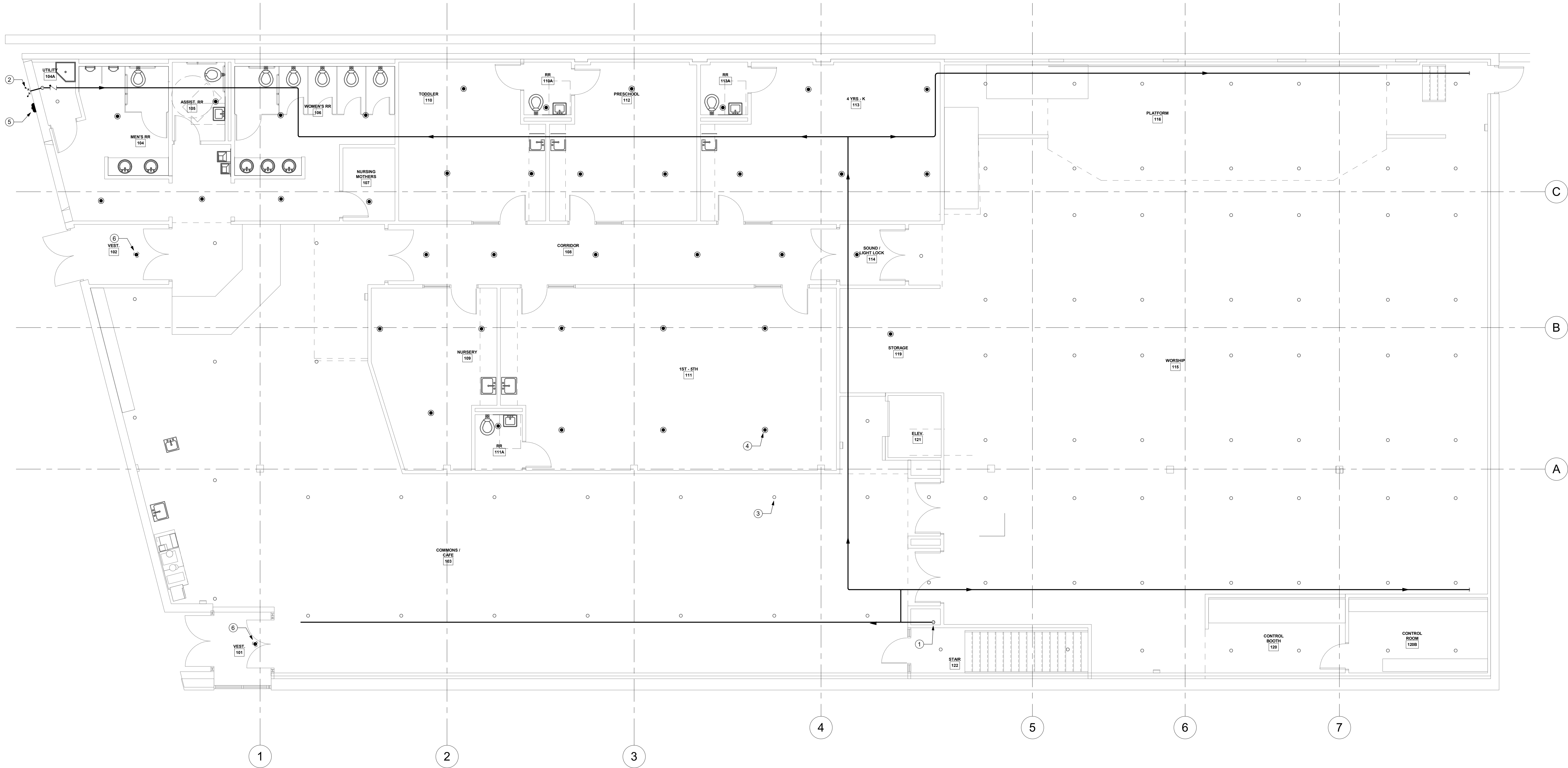
20007

Date

03.03.21

FIRST FLOOR FIRE
PROTECTION PLAN

FP1.11



1 FIRST FLOOR FIRE PROTECTION PLAN
3/16" = 1'-0"



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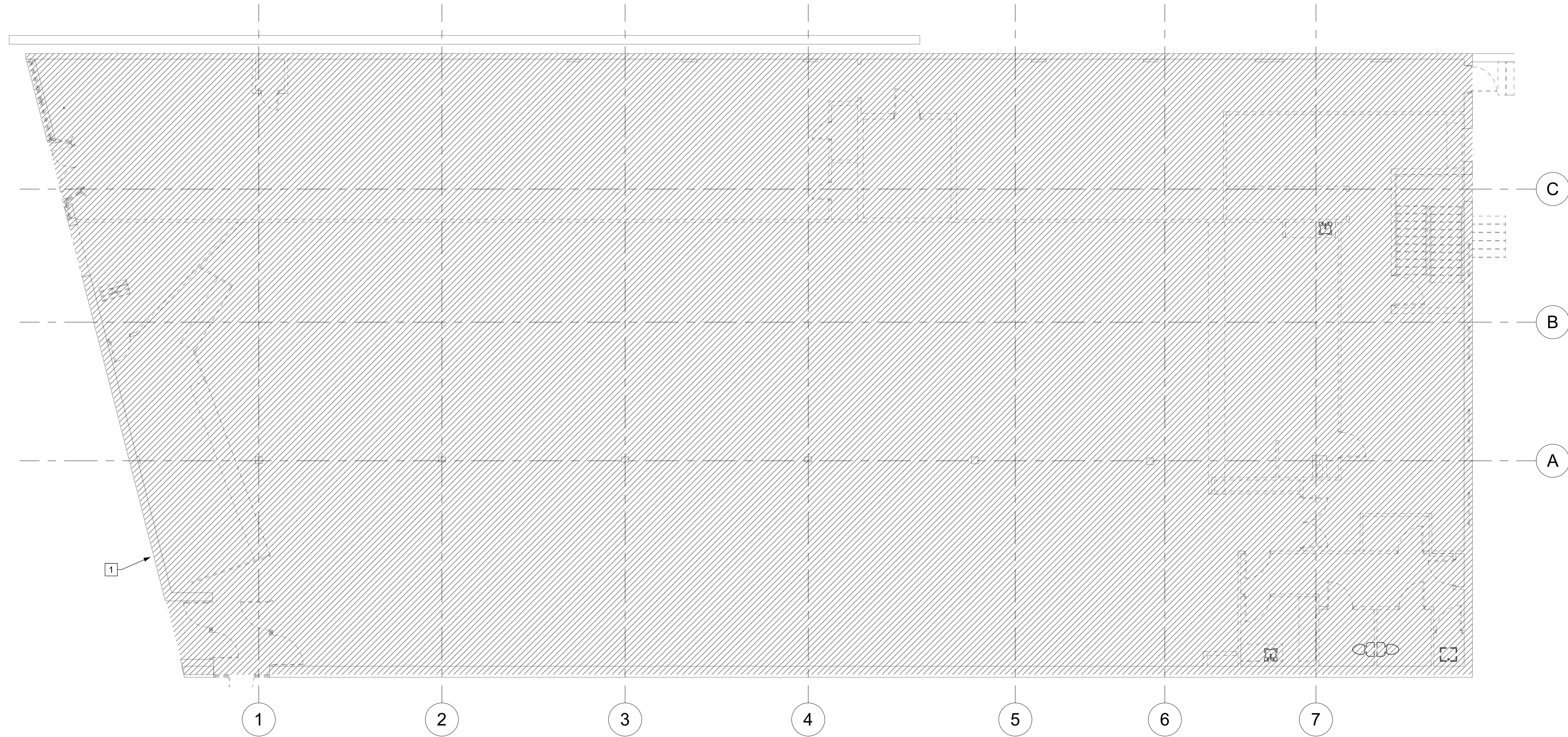
Date
03.03.21

BASEMENT AND
FIRST FLOOR FIRE
PROTECTION
REMOVALS

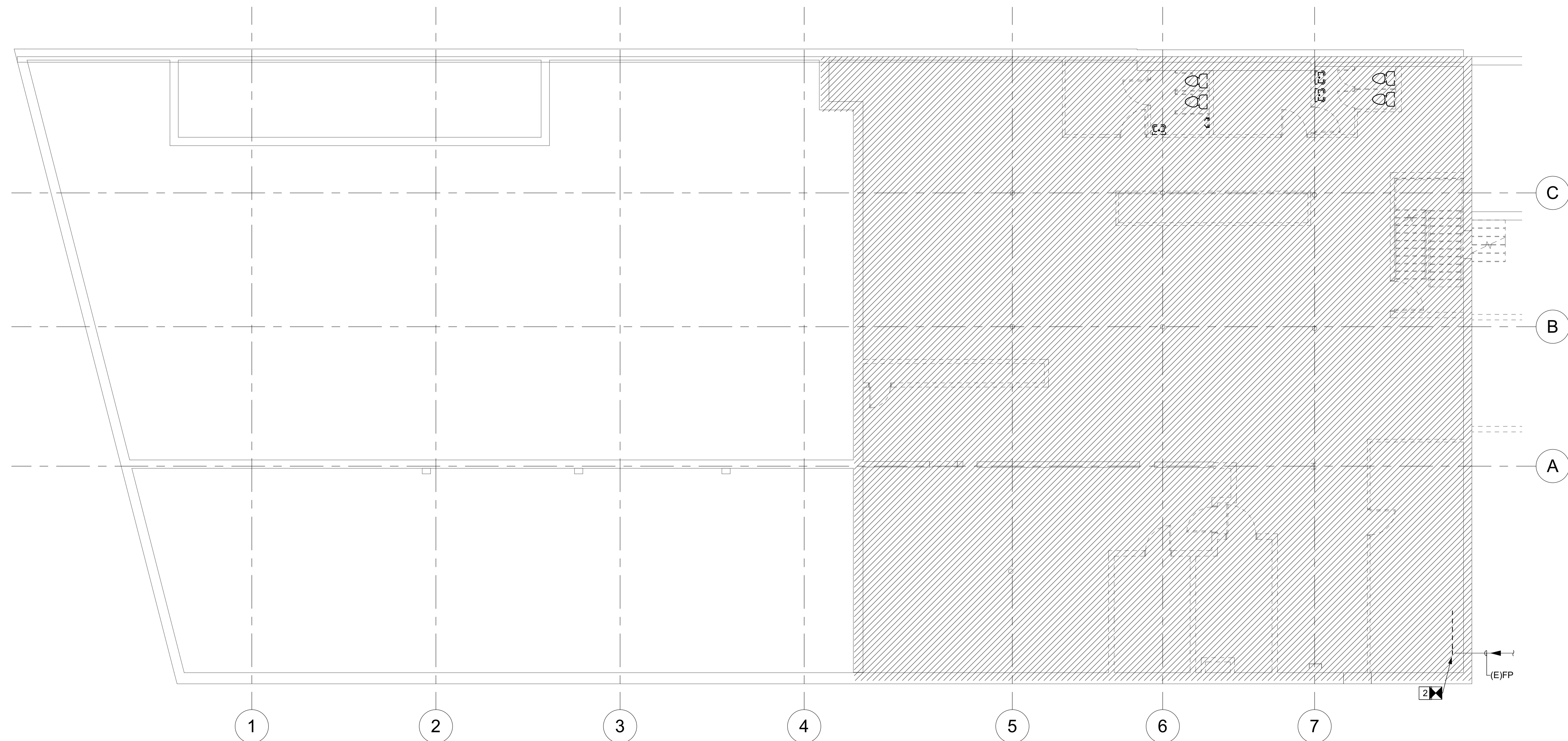
FPD1.11

FPD-1.11 DEMOLITION NOTES

- 1 ALL EXISTING SPRINKLERS AND ASSOCIATED PIPING, FIRE DEPARTMENT CONNECTION, AND ALARM BELL TO BE REMOVED
- 2 ALL EXISTING SPRINKLERS AND ASSOCIATED PIPING, ALARM VALVE TO BE REMOVED BACK TO SERVICE ENTRY



2 FIRST FLOOR FIRE PROTECTION REMOVAL PLAN
1/8" = 1'-0"



1 BASEMENT LEVEL FIRE PROTECTION REMOVAL PLAN
1/8" = 1'-0"

PLUMBING FIXTURE CONNECTION SCHEDULE							
SEE PLUMBING SPECIFICATIONS FOR COMPLETE FIXTURE INFORMATION							
TAG NO.	DESCRIPTION	COLD WATER	HOT WATER	WASTE	SANITARY	VENT	REMARKS
WC-A	WATER CLOSET	1"	-	-	3"	2"	AMERICAN STANDARD 2234.015, FLOOR MOUNT, SLOAN MANUALLY OPERATED FLUSHOMETER (FV-A), CHURCH 9500SCC OPEN FRONT, LESS COVER
WC-B	WATER CLOSET ADA	1"	-	-	3"	2"	AMERICAN STANDARD 3043.102, FLOOR MOUNT, SLOAN MANUAL FLUSHOMETER (FV-A), CHURCH 9500SCC OPEN FRONT, LESS COVER
WC-C	WATER CLOSET KINDERGARTEN	1"	-	-	3"	2"	AMERICAN STANDARD 3043.102, FLOOR MOUNT, SLOAN MANUAL FLUSHOMETER (FV-A), CHURCH 9500SCC OPEN FRONT, LESS COVER
LV-A	LAVATORY	1/2"	1/2"	1-1/2"	-	1-1/2"	AMERICAN STARDARD 0356.421 LUCERNE, WALL HUNG, DECK MOUNTED SENSOR FAUCET (F-A), 0.5 GPM NON-AERATING SPRAY OUTLET.
LV-B	LAVATORY ADA	1/2"	1/2"	1-1/2"	-	1-1/2"	AMERICAN STARDARD 0475.047 AQUALYN, SELF-RIMMING, DECK MOUNTED MANUAL FAUCET (F-A), 0.5 GPM NON-AERATING SPRAY OUTLET.
LV-C	LAVATORY KINDERGARTEN	1/2"	1/2"	1-1/2"	-	1-1/2"	AMERICAN STARDARD 0356.421 LUCERNE, WALL HUNG, DECK MOUNTED SENSOR FAUCET (F-A), 0.5 GPM NON-AERATING SPRAY OUTLET, MOUNTED 24" AFF TO RM.
SK-A	SINK - VOLUNTEERS	1/2"	1/2"	1-1/2"	-	1-1/2"	CORIAN ELEMENTS 8254 (BY GC), UNDERMOUNT, CHICAGO FAUCET (F-B), GOOSENECK SPOUT, MANJAL CLOSE WITH WRISTBLADE FAUCETS, LAMINAR FLOW
SK-B	SINK - CLASSROOMS, COFFEE BAR	1/2"	1/2"	1-1/2"	-	1-1/2"	KARRAN E-505, UNDERMOUNT, CHICAGO FAUCET (F-B), GOOSENECK SPOUT, MANJAL CLOSE WITH WRISTBLADE FAUCETS, LAMINAR FLOW
SK-C	SINK - LOBBY ISLAND	1/2"	1/2"	1-1/2"	-	1-1/2"	AMERICAN STARDARD 0355.012 LUCERNE, WALL HUNG, DECK MOUNTED MANUAL FAUCET (F-A), 0.5 GPM NON-AERATING SPRAY OUTLET.
EW-C-A	WATER COOLER	1/2"	1/2"	1-1/2"	-	1-1/2"	ELKAY ED200 BOTTLE FILLING STATION & BLUEVEL ADA COOLER, NON-FILTERED, REFRIGERATED, STAINLESS - EZ2SLBW/SR/K
MB-A	MOP BASIN	1/2"	1/2"	3"	-	2"	FIAT MSB, MOLDED STONE NEO CORNER, 24" X 24" X 10", T&S BRASS B-0665-BSTP WALL MOUNTED FAUCET, BUCKET HOOK, HOSE END, VACUUM BREAKER
UR-A	URINAL	3/4"	-	-	2-1/2"	2"	AMERICAN STANDARD 6501.010, WALL MOUNT TOP-SPUD, MANUAL FLUSH VALVE

PUMP SCHEDULE									
NO.	LOCATION	SERVICE	GPM	HEAD FT WATER	MOTOR				DESIGN MAKE
					HP	VOLTAGE	PHASE	RPM	
PP-1	B104A	DOM. HOT WATER	11.7	30	1/3	115	1	3450	IN LINE TACO 2440
SP-1	ELEVATOR	SUMP	50	15	1/2	115	-	-	SUMP LIBERTY 287

PLUMBING EQUIPMENT CONNECTION SCHEDULE						
TAG NO.	DESCRIPTION	LOCATION	BODY	STRAINER	MANUFACTURER AND REMARKS	
FD-A	FLOOR DRAIN	FINISHED AREAS	CAST IRON	NICKEL BRONZE	JAY R SMITH FIG 2010C-A	
FD-B	FLOOR DRAIN	UNFINISHED AREAS	CAST IRON	POLISHED BRONZE	JAY R SMITH FIG 2010C-A WITH WASTE FUNNEL OR 1/2 GRATE	
TD-A	TRENCH DRAIN	OUTSIDE RAMP	HDPE	-HPS	ZURN Z883 WITH HEEL PROOF STAINLESS STEEL SLOTTED GRATE	

EXPANSION TANK SCHEDULE						
TAG NO.	LOCATION	SERVICE	MAXIMUM SYSTEM PRESSURE (PSI)	TANK VOLUME (GALS.)	ACCEPTANCE FACTOR	MANUFACTURER AND REMARKS
ET-1	B104A	DOMESTIC HOT WATER	150	2.0	0.45	ST-5

NATURAL GAS WATER HEATER SCHEDULE						
TAG NO.	LOCATION	VENT SIZE (IN)	STORAGE CAPACITY (GAL)	GPH RECOVERY @ 100°F RISE	NATURAL GAS GPH	REFERENCE MANUFACTURER
GWH-1	B104A	3"	80	138	120	AOSMITH BTH-120

PLUMBING GENERAL NOTES	
#	Note
A	THESE NOTES ARE APPLICABLE TO THE FULL SET OF CONTRACT DRAWINGS
B	EXISTING CONDITIONS ARE TAKEN FROM FIELD OBSERVATIONS AND PRIOR CONSTRUCTION DOCUMENTS WHEN AVAILABLE. THE LOCATIONS SHOWN MUST BE CONSIDERED APPROXIMATE. OTHER SUCH WORK MAY EXIST, HOWEVER LOCATION AND SIZE ARE NOT PRESENTLY KNOWN.
C	WHEN EXISTING CONSTRUCTION IS DAMAGED BY WORK BY THIS CONTRACTOR, REPAIR AND/OR REPLACE WITH SIMILAR MATERIALS AS MUCH AS POSSIBLE, SUBJECT TO ARCHITECTS APPROVAL.
D	DISPOSE OF ALL DEMOLITION AND/OR OTHER WASTE MATERIALS CAUSE BY WORK OF THIS CONTRACTOR. LEGALLY DISPOSE ALL MATERIALS TO A LOCATION OFF SITE.
E	COORDINATE AND SCHEDULE WORK AND SHUTDOWNS WITH THE OWNER AND OTHER TRADES PRIOR TO DEMOLITION.
F	ALL EXISTING PIPING TO REMAIN SHALL BE RECONNECTED TO ACTIVE SERVICE PIPING.
G	ALL PIPING TO BE REMOVED SHALL BE REMOVED BACK TO ACTIVE SERVICE PIPING AND CAPPED. VALVE AND CAP ALL WATER PIPING. REMOVE ALL INACTIVE PIPING UNLESS OTHER WISE NOTED.
H	ALL PIPING TO BE REMOVED AND IN A WALL TO REMAIN MAY BE ABANDONED IN PLACE UNLESS NOTED.
I	PATCH HOLES IN EXISTING CONSTRUCTION LEFT BY THE REMOVAL OF PIPING OR EQUIPMENT WITH MATERIALS TO MATCH EXISTING CONSTRUCTION. MAINTAIN FIRE SMOKE RATING.
J	DEMOLITION SHALL INCLUDE, BUT NOT LIMITED TO: PIPING, VALVES, FIXTURES, EQUIPMENT, HANGERS, SUPPORTS AND INSULATION, EXCEPT ASBESTOS.
K	REMOVE EXISTING CONSTRUCTION IN THE WAY OF NEW WORK. PROTECT BUILDINGS AND FURNISHINGS FROM DAMAGE.
L	WHERE NEW WORK IS TO BE INSTALLED ABOVE AN EXISTING CEILING, PROVIDE FOR THE REMOVAL OF THE CEILING. UPON COMPLETION OF WORK, REPAIR ALL DAMAGED CEILING SURFACES, REPLACE ALL DAMAGED TILES.
M	SLEEVE AND SEAL ALL WALL AND FLOOR PENETRATIONS. PROVIDE FIRESTOPPING FOR ALL PENETRATIONS.
N	MAINTAIN SERVICE CLEARANCES OF ALL EQUIPMENT. ADVISE OTHER TRADES OF REQUIRED CLEARANCES.
O	PROVIDED FOR THE DRAINAGE AND REFILLING OF PIPING SYSTEMS, INCLUDING AIR REMOVAL, RESETTNG OF FLUSH VALVES, FLUSHING SYSTEMS OF DIRT AND SCALE CAUSED BY SHUTDOWNS AND STARTUPS.
P	REFER TO EQUIPMENT/FIXTURE SCHEDULE FOR FINAL CONNECTION SIZES.
Q	PROVIDE CLEANOUTS AT THE BASE OF ALL STORM, SANITARY AND WASTE STACKS.
R	PITCH 4" AND LARGER SANITARY AND WASTE PIPING AT 1/8" PER FOOT UNLESS NOTED OTHERWISE. FOR SANITARY AND WASTE PIPING 3" AND SMALLER, PITCH AT 1/4" PER FOOT UNLESS NOTED OTHERWISE.
S	COORDINATE LOCATION AND ELEVATION OF STORM AND SANITARY LATERALS AND WATER SERVICE PIPING WITH THE SITE CONTRACTOR. NO ALLOWANCES WILL BE MADE FOR ADDITIONAL COST DUE TO THE CONTRACTORS FAILURE TO COORDINATE TERMINATION POINTS. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR THE FINAL CONNECTIONS TO THE SITE UTILITIES.
T	MINIMUM SIZE OF WASTE PIPING BELOW SLAB SHALL BE 3" EXCEPT PIPING SERVING FLOOR DRAINS SHALL BE 4". MINIMUM SIZE OF VENT PIPING BELOW SLAB SHALL BE 2" UNLESS NOTED OTHERWISE.
U	PITCH 4" AND LARGER STORM PIPING AT 1/4" PER FOOT UNLESS NOTED OTHERWISE.

PLUMBING SYMBOL LIST	
SYMBOL	DESCRIPTION
---	EXISTING WORK TO BE REMOVED
●	POINT OF CONNECTION
✕	POINT OF DISCONNECTION
NTS	NOT TO SCALE
(E)	EXISTING
(ETR)	EXISTING TO REMAIN
AF	ABOVE FINISHED FLOOR
BFF	BELOW FINISHED FLOOR
VTR	VENT THRU ROOF
GC	GENERAL CONTRACTOR
MC	MECHANICAL CONTRACTOR
PC	PLUMBING CONTRACTOR
EC	ELECTRICAL CONTRACTOR
(E)	EXISTING PIPING
---	COLD WATER PIPING (CW)
---	HOT WATER PIPING (HW)
---	HOT WATER RECIRCULATING PIPING (HWR)
SAN	SANITARY SEWER PIPING
IW	INDIRECT WASTE PIPING (IW)
---	VENT PIPING
G	NATURAL GAS PIPING (G)
---	ELBOW DOWN
---	45° OFFSET
---	ELBOW UP
---	BOTTOM/TEE CONNECTION
---	TOP TEE CONNECTION
---	"P" TRAP
---	PIPE CONTINUATION
---	CAP OR PLUG
---	DECK PLATE CLEANOUT (DPCO)
---	WALL PLATE CLEANOUT (WPCO)
---	CLEANOUT (CO)
---	FLOOR DRAIN (FD) / FLOOR SINK (FS)
---	WALL HYDRANT (WH) / HOSE BIBB (HB)
---	STRAINER
---	WATER METER
---	CATCH BASIN
---	SHUT OFF VALVE
---	BALANCING VALVE
---	CHECK VALVE
---	UNION
---	BACKFLOW PREVENTER (BFP)
---	SHOWER HEAD
---	SHOCK ABSORBER (SA)
---	RECIRCULATION PUMP
---	THERMOMETER
---	PRESSURE GAUGE



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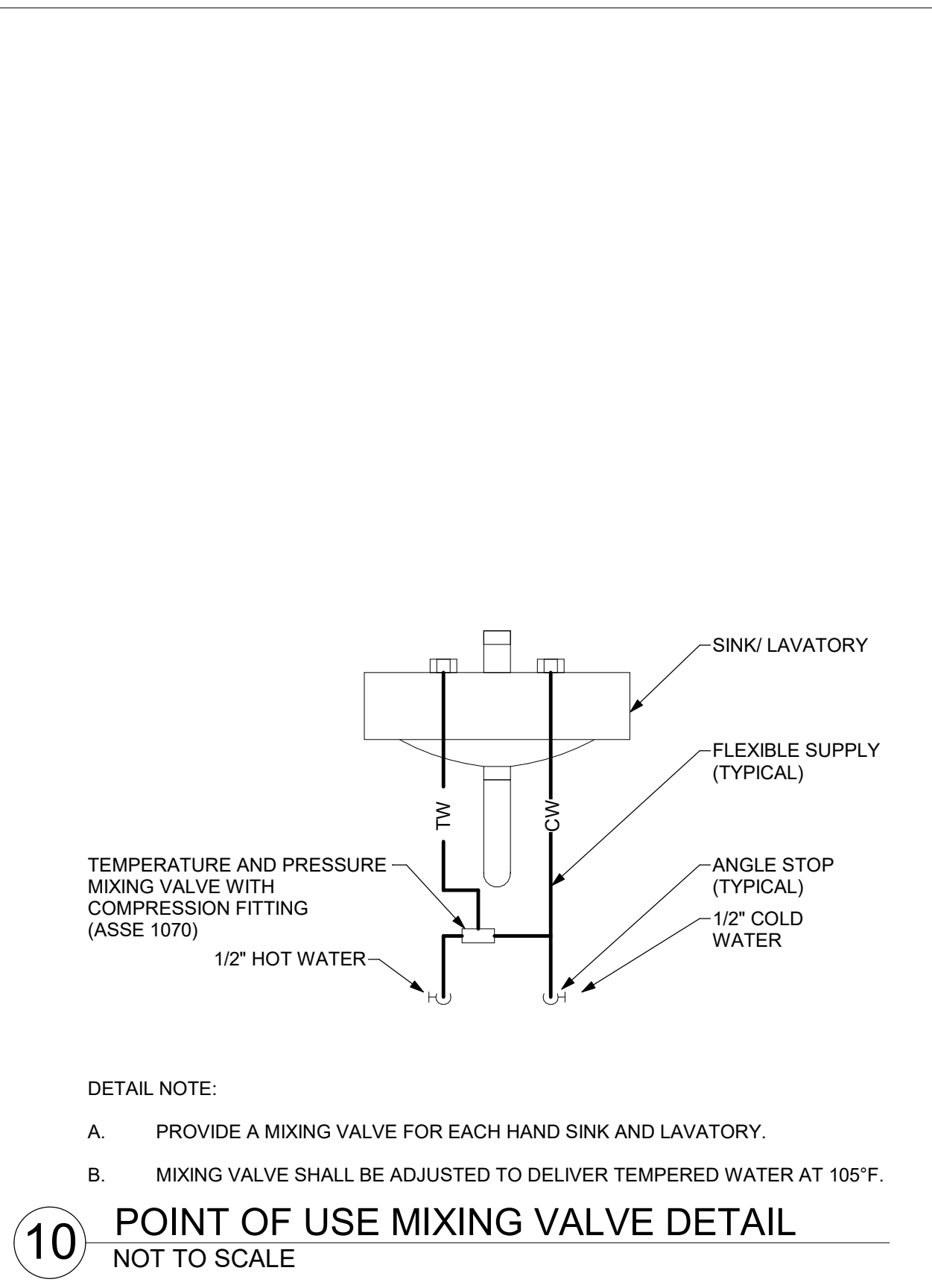
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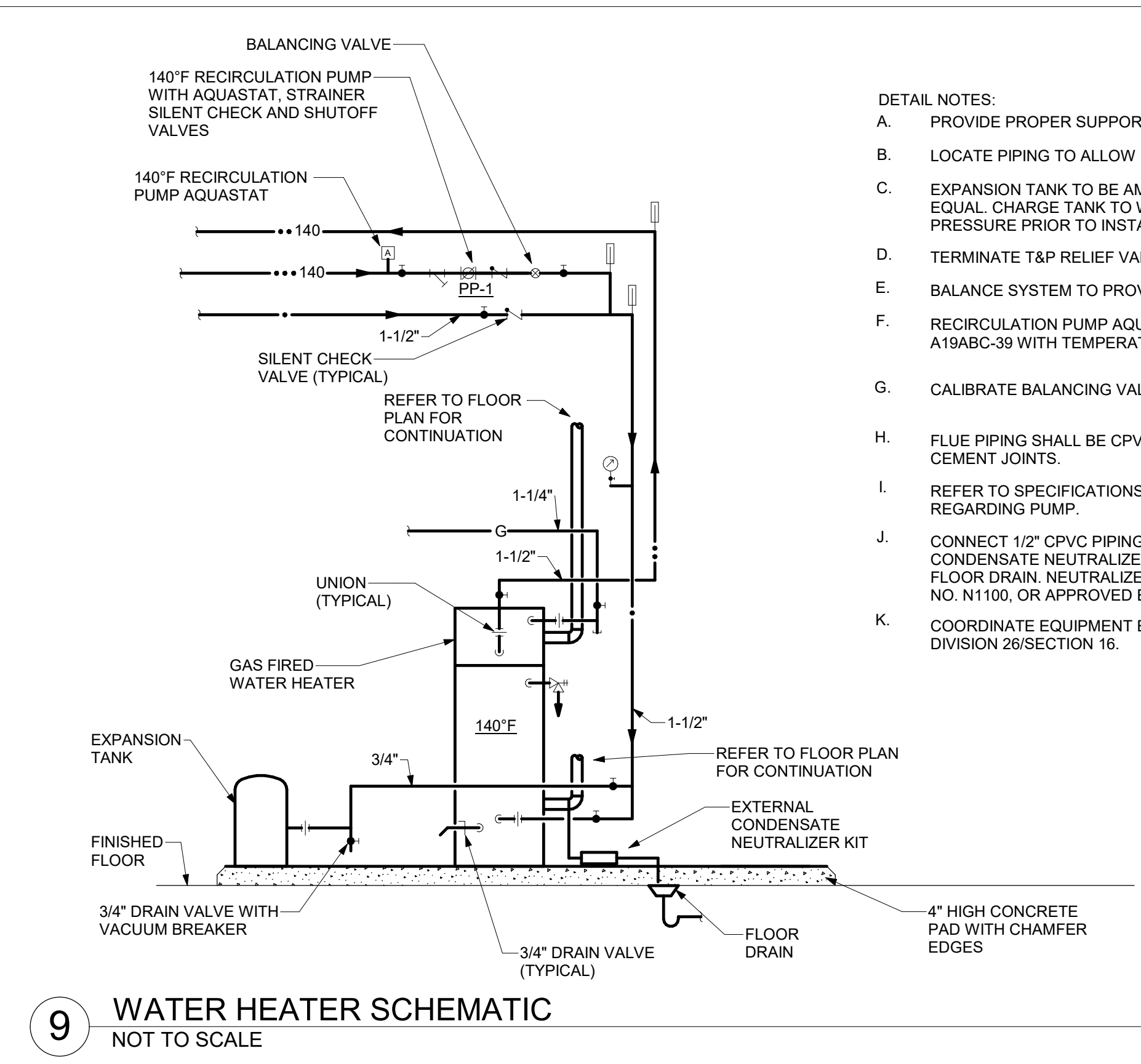
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PLUMBING NOTES
AND SCHEDULES

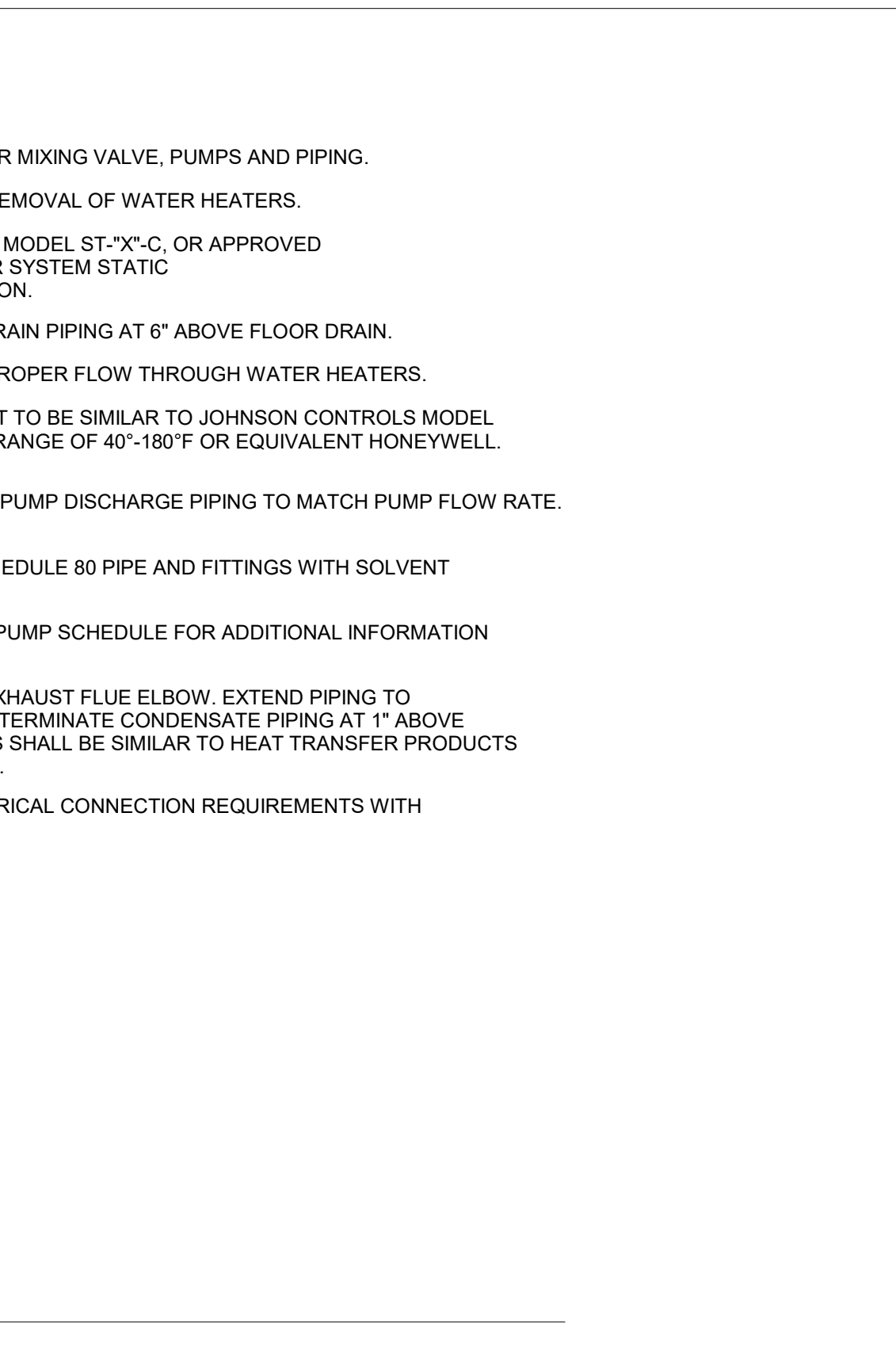
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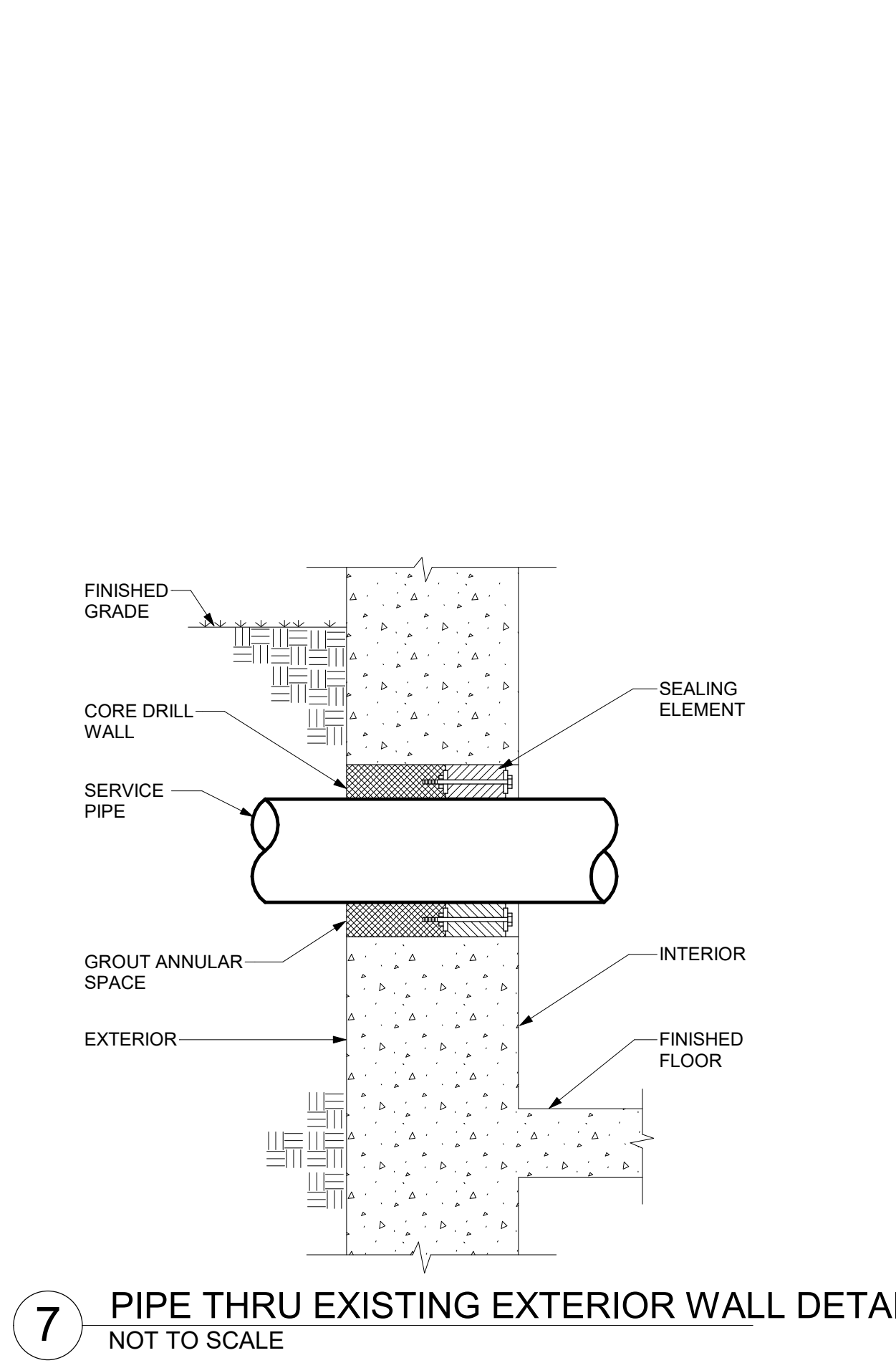
10 POINT OF USE MIXING VALVE DETAIL
NOT TO SCALE



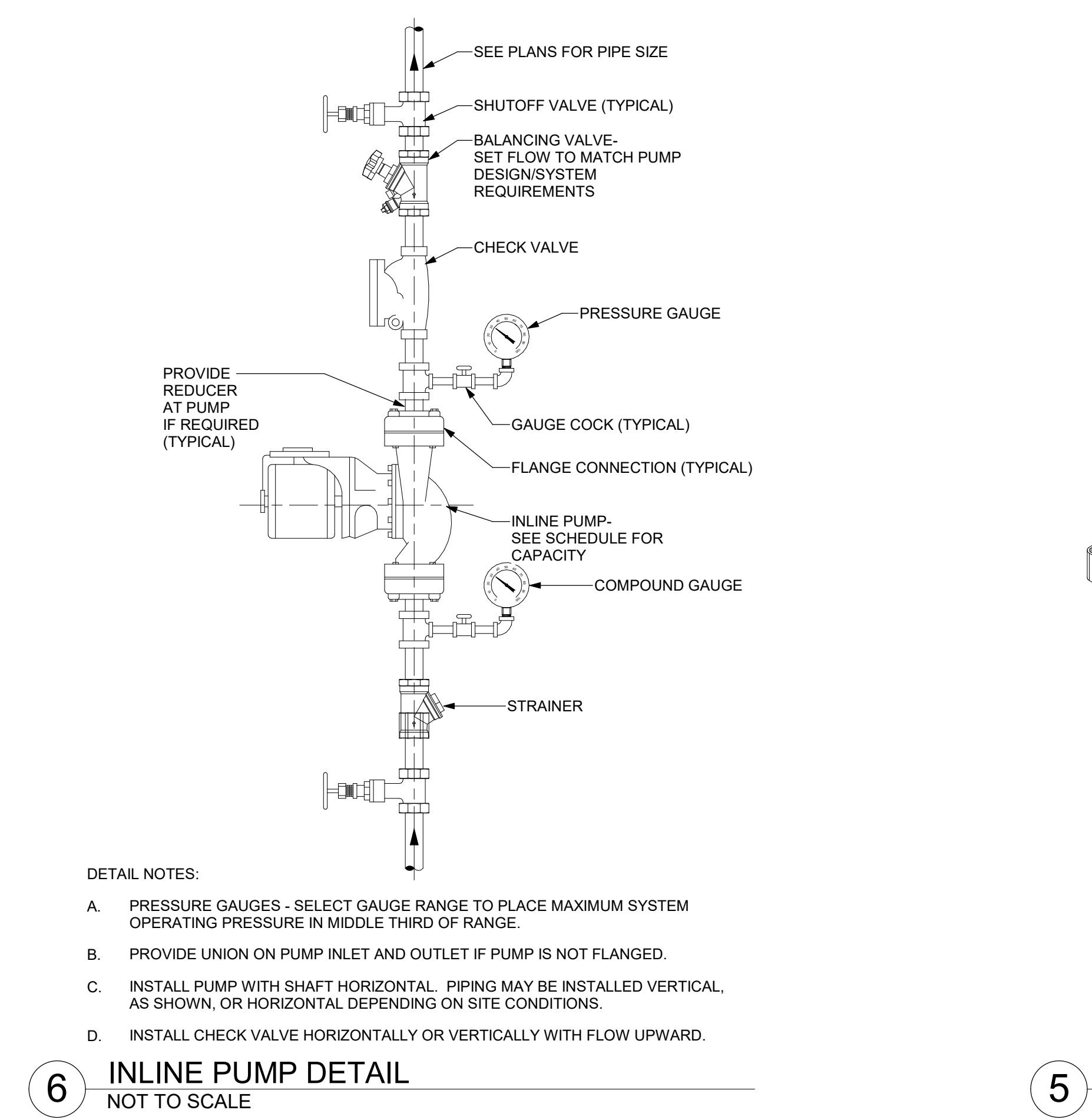
9 WATER HEATER SCHEMATIC
NOT TO SCALE



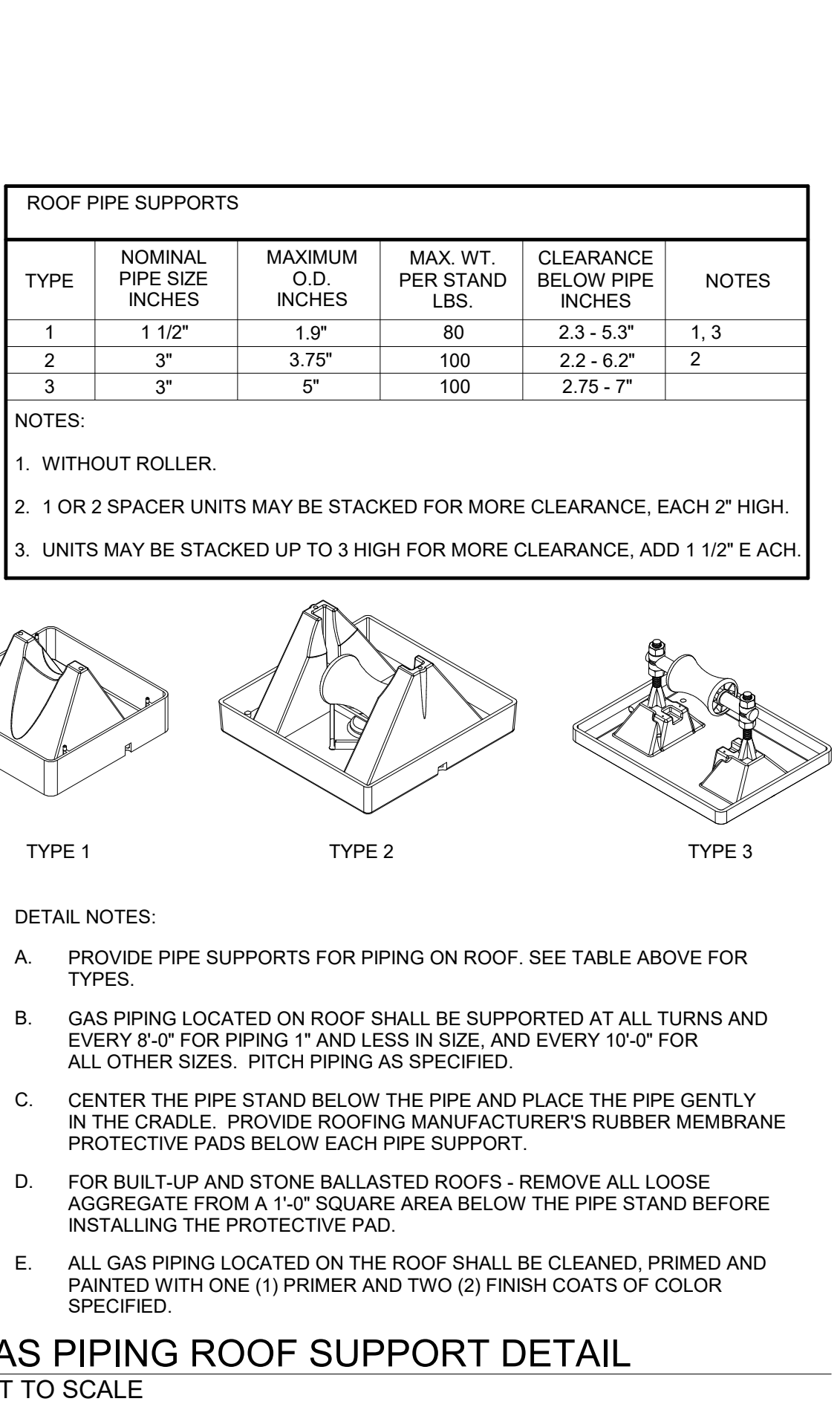
8 PIPING IDENTIFICATION LABEL DETAIL
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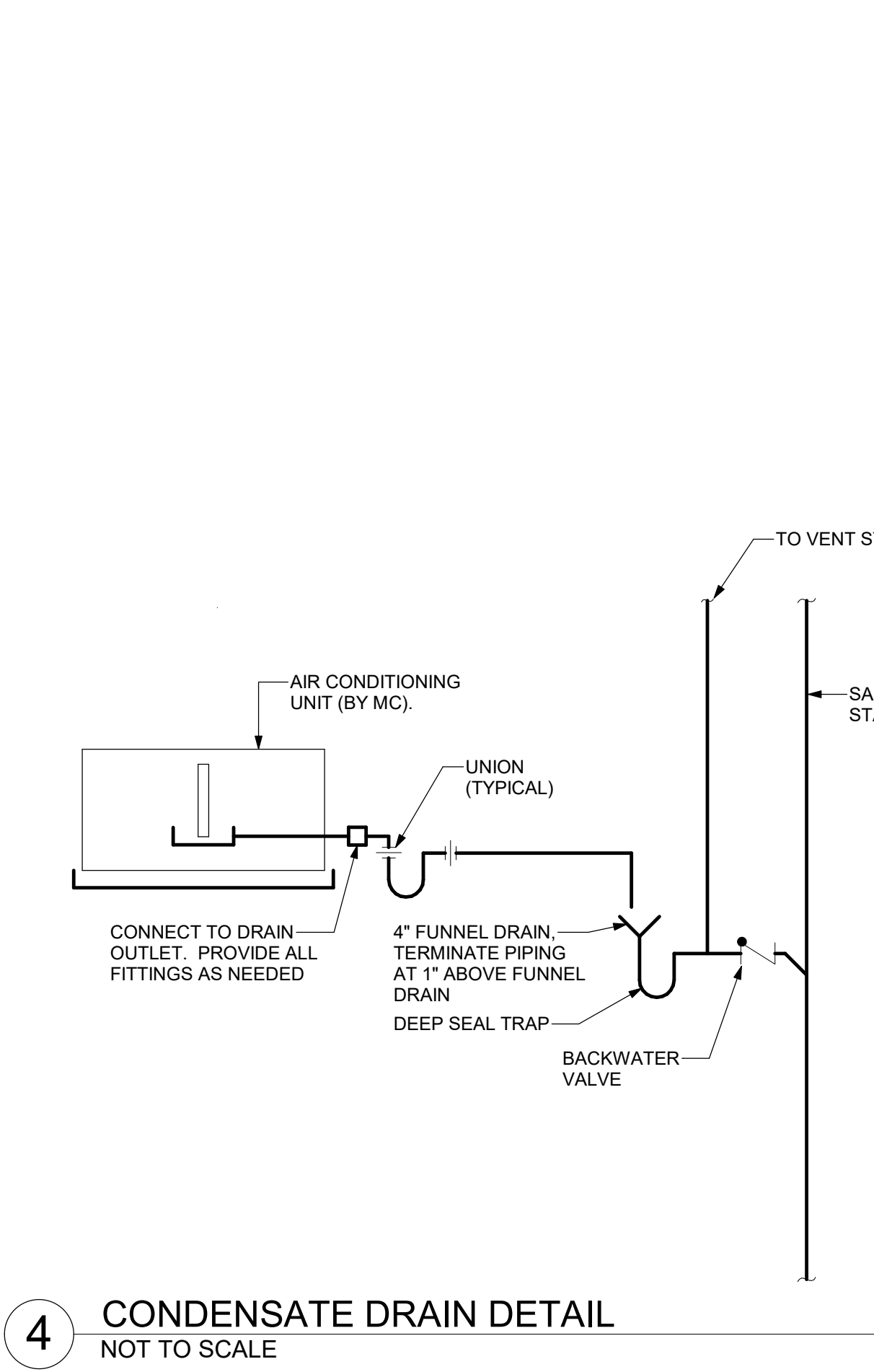
7 PIPE THRU EXISTING EXTERIOR WALL DETAIL
NOT TO SCALE



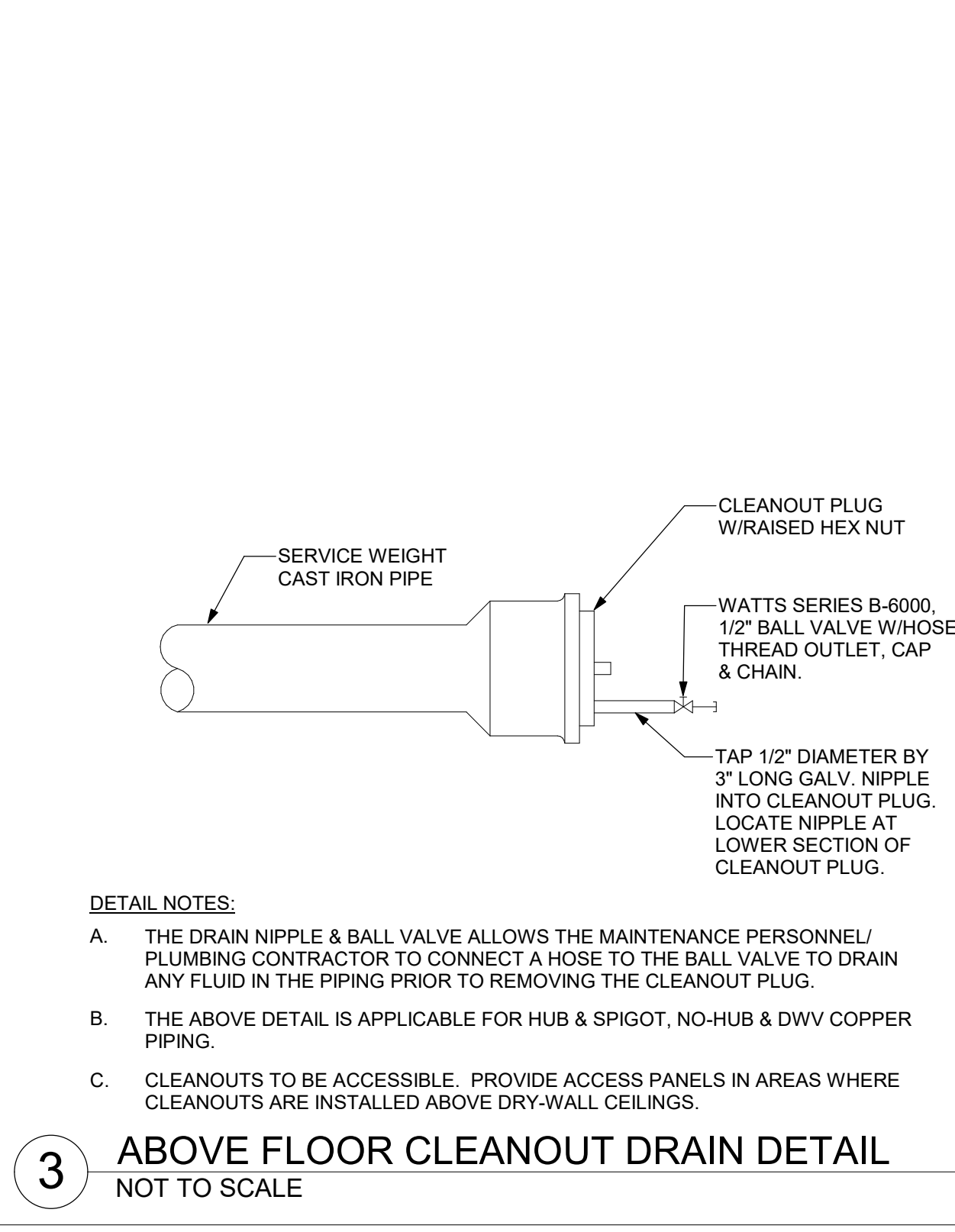
6 INLINE PUMP DETAIL
NOT TO SCALE



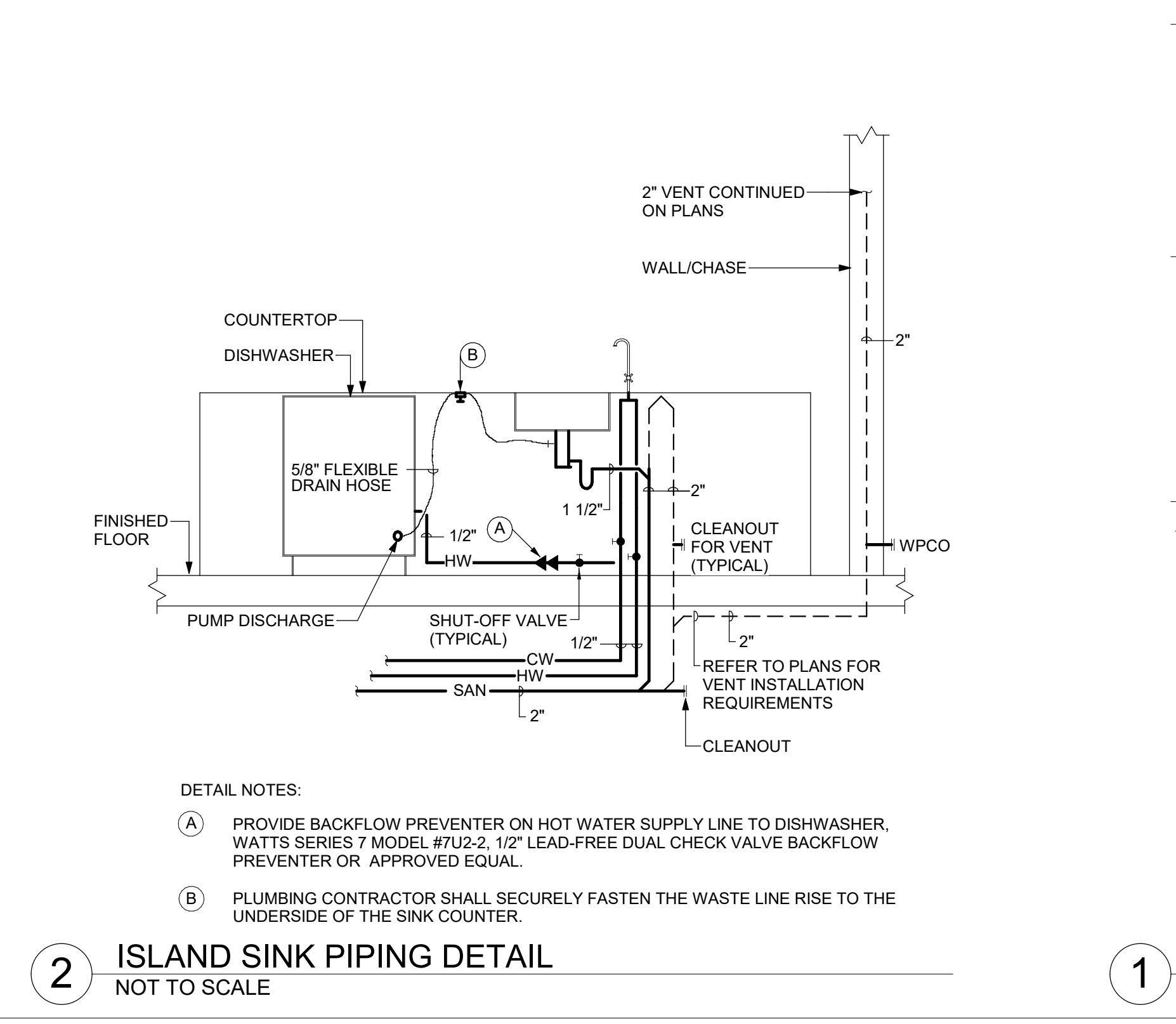
5 GAS PIPING ROOF SUPPORT DETAIL
NOT TO SCALE



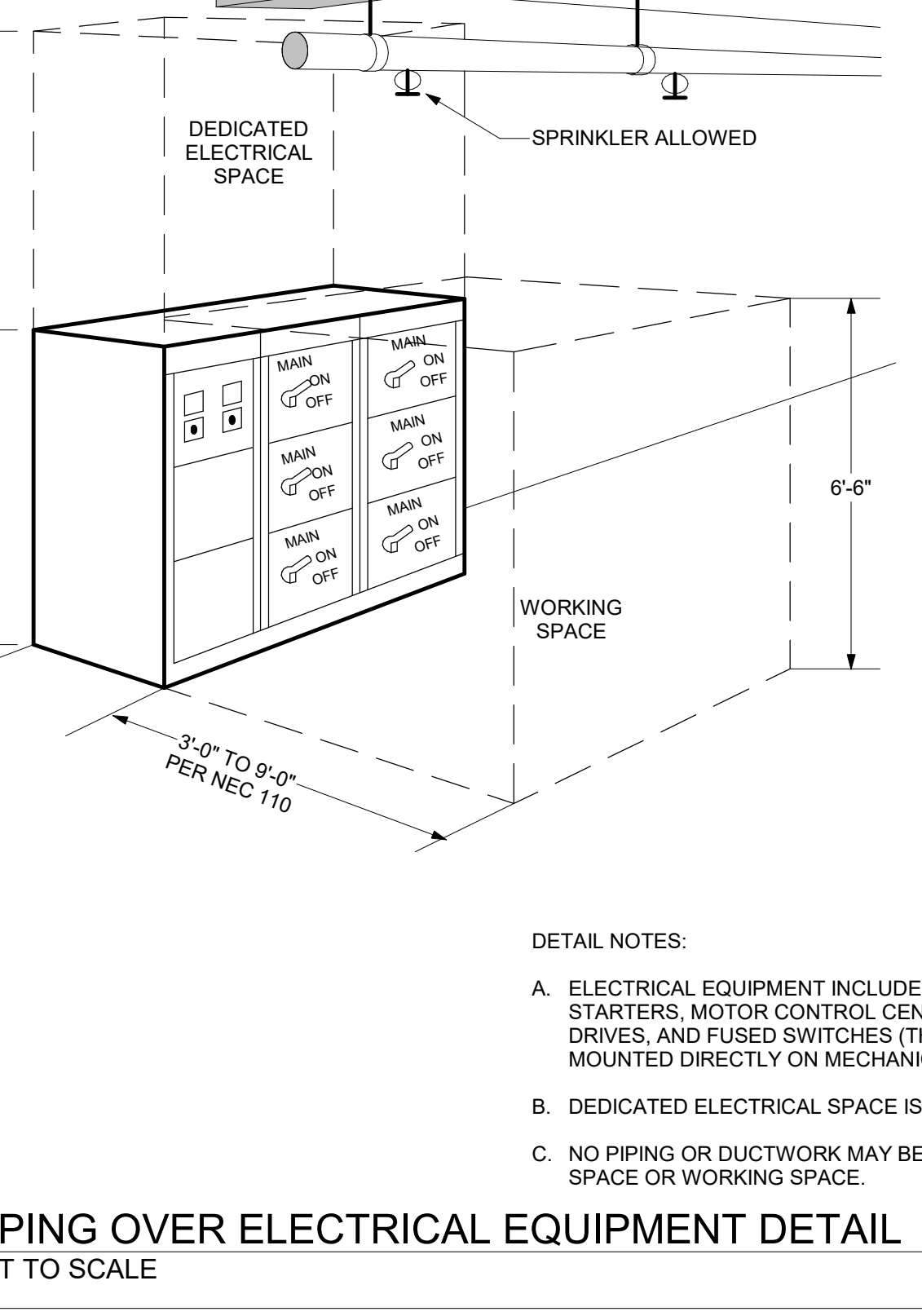
4 CONDENSATE DRAIN DETAIL
NOT TO SCALE



3 ABOVE FLOOR CLEANOUT DRAIN DETAIL
NOT TO SCALE



2 ISLAND SINK PIPING DETAIL
NOT TO SCALE



1 PIPING OVER ELECTRICAL EQUIPMENT DETAIL
NOT TO SCALE

P1.00 DRAWING NOTES

- 1 3" SANITARY UP TO DECK PLATE CLEAN OUT
- 2 3" SANITARY UP
- 3 2" SANITARY UP
- 4 3" SANITARY WITH P-TRAP UP
- 5 1-1/2" VENT UP
- 6 3" SANITARY CONNECT TO EXISTING AT ASSUMED EXISTING LOCATION
- 7 ASSUMED LOCATION OF EXISTING SANITARY BASED ON FIELD OBSERVATION.
- 8 2" SANITARY DISCHARGE FROM SUMP PUMP UP
- 9 2" SANITARY WITH P-TRAP UP
- 10 4" STORM UP TO TRENCH DRAIN
- 11 4" STORM DISCHARGE TO EXTERIOR GRADE AT EMBANKMENT OUTSIDE REAR OF LOADING DOCK



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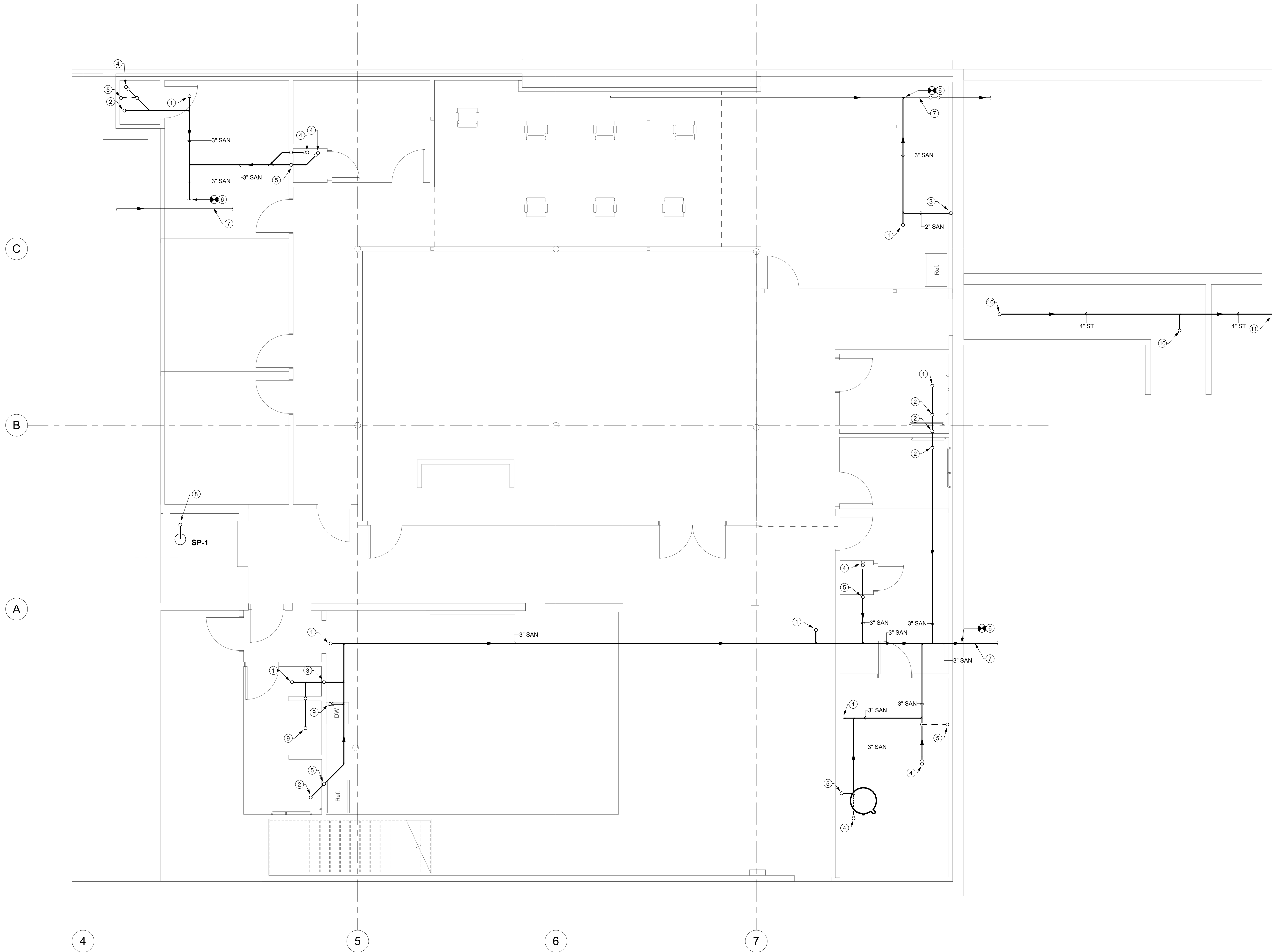
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UNDERSLAB
LEVEL PLUMBING
PLAN EAST

P1.00

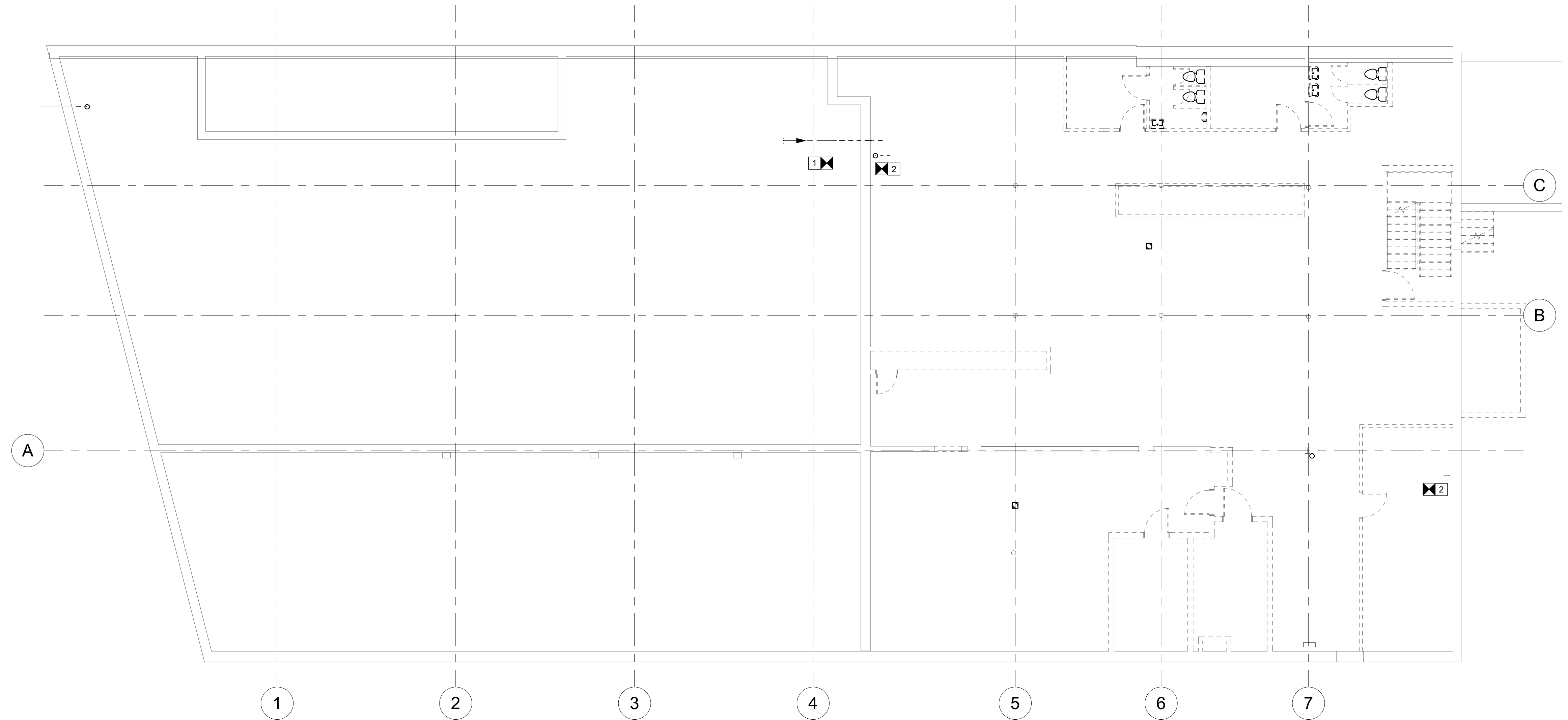


1 UNDERSLAB LEVEL PLUMBING PLAN - EAST
1/4" = 1'-0"

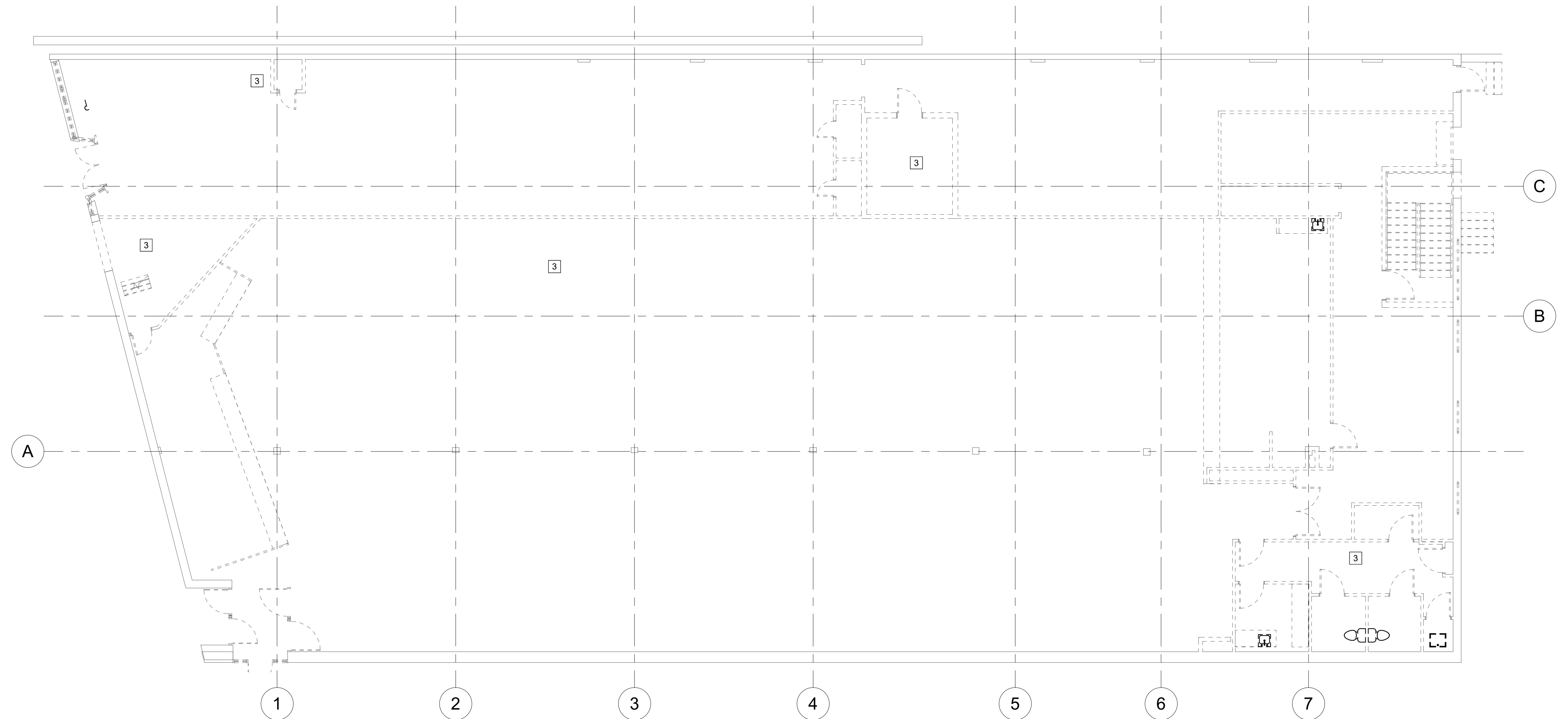


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1 REMOVAL ALL DOMESTIC WATER PIPING BACK TO MAIN SERVICE IN CRAWL SPACE
2 REMOVAL ALL ABOVE SLAB SANITARY AND VENT PIPING BACK TO MAINS BELOW FLOOR
3 ALL DOMESTIC WATER, GAS PIPE, VENTS AND FIXTURES TO BE REMOVED



2 BASEMENT LEVEL PLUMBING REMOVALS PLAN
1/8" = 1'-0"



1 FIRST FLOOR PLUMBING REMOVALS PLAN
1/8" = 1'-0"

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BASEMENT AND FIRST FLOOR PLUMBING REMOVALS

PD1.11

P1.01 DRAWING NOTES

- 1 3" SANITARY UP TO DECK PLATE CLEAN OUT
- 2 3" SANITARY UP
- 3 2" SANITARY UP
- 4 3" SANITARY WITH P-TRAP UP
- 5 NATURAL GAS FROM UTILITY SERVICE LINE UP
- 6 1/2" HOT AND COLD WATER UP
- 7 1-1/2" VENT UP
- 8 3/4" HOT AND COLD WATER UP



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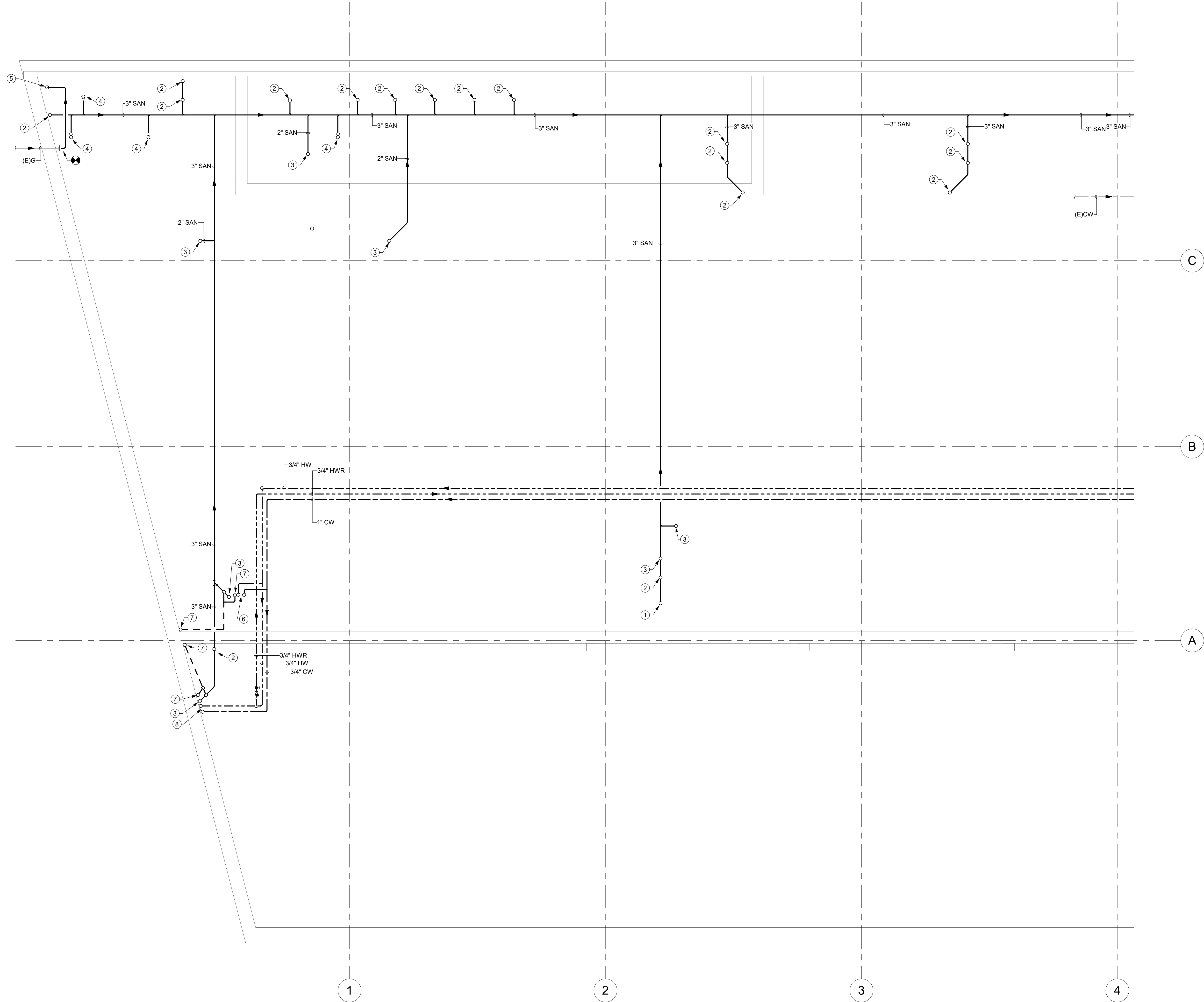
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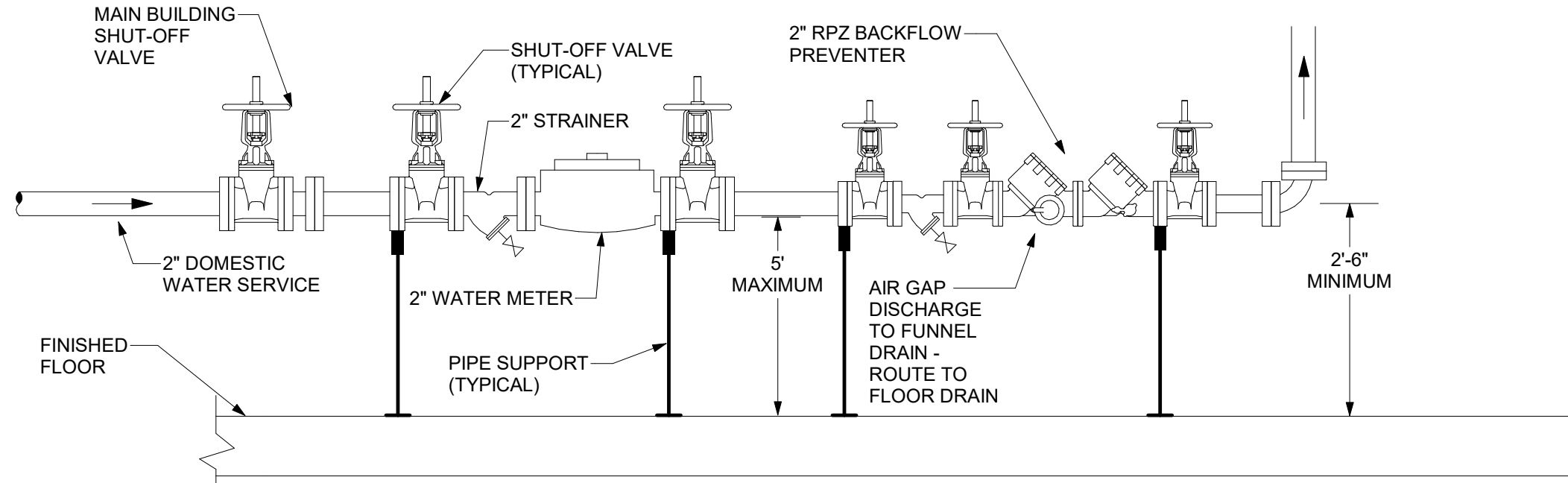
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BASEMENT LEVEL
PLUMBING PLAN
WEST

P1.01



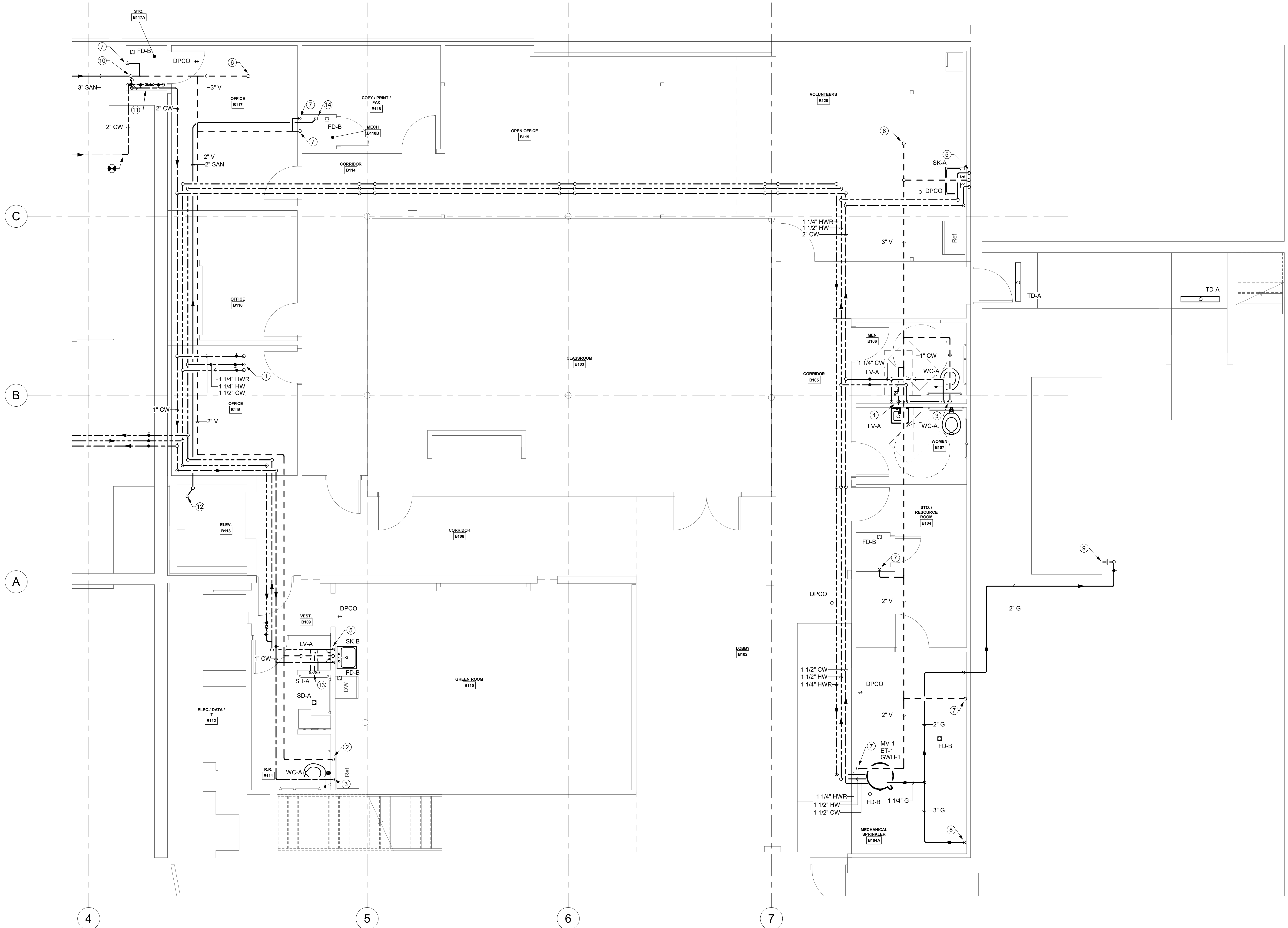
1 BASEMENT LEVEL PLUMBING PLAN - WEST
1/4" = 1'-0"



- DETAIL NOTES:
- PROVIDE PROPER SUPPORTS FOR BACKFLOW PREVENTERS, WATER METER AND PIPING.
 - PROVIDE 8" CLEARANCE BEHIND BACKFLOW PREVENTERS, 1'-0" ABOVE AND 2'-6" CLEARANCE IN FRONT OF DEVICES.
 - THE INSTALLATION OF FIXED AIR GAP FITTINGS ARE NOT ACCEPTABLE FOR USE ON DRAIN LINES. PROVIDE FUNNEL DRAINS AS INDICATED.
 - PAINT SUPPORTS WITH ONE (1) PRIMER AND TWO (2) FINISH COATS OF COLOR AS SPECIFIED.
 - PROVIDE FIXED PLATFORM SHOULD THE UPPER BACKFLOW PREVENTER BE INSTALLED HIGHER THAN 5'-0" ABOVE FINISHED FLOOR. HEIGHT OF UPPER BACKFLOW PREVENTER FROM TOP OF PLATFORM SHALL NOT EXCEED 5'-0".
 - HEAT AND LIGHT ARE PROVIDED IN THE AREA OF THE BACKFLOW PREVENTERS.
 - PROVIDE SPOOL PIECES AT INLET AND OUTLET OF METER AS RECOMMENDED BY METER MANUFACTURER.

2 DOMESTIC WATER SERVICE ENTRANCE DETAIL

NOT TO SCALE



1 BASEMENT LEVEL PLUMBING PLAN - EAST

1/4" = 1'-0"

P1.02 DRAWING NOTES

- 1-1/2" COLD WATER, 1-1/4" HOT WATER, AND 1-1/4" HOT WATER RETURN UP
- 2" VENT RISE
- 2" VENT RISE: 1" COLD WATER DROP
- 2" SANITARY DROP, ROUTE IN WALL: 3/4" HOT AND COLD WATER DROP
- 1-1/2" SANITARY DROP, 2" SANITARY DOWN, 1-1/2" VENT RISE: 1/2" HOT AND COLD WATER DROP, ROUTE 1/2" HOT WATER UNDERCOUNTER TO DISHWASHER. PROVIDE SANITARY CONNECTION IN TAILPIECE FOR DISHWASHER DRAIN CONNECTION
- 3" VENT UP
- 1-1/2" VENT RISE
- 3" NATURAL GAS UP
- 2" NATURAL GAS CONNECTION TO HVAC EQUIPMENT. PROVIDE BALL VALVE AND DRIP LEG IN DROP AND UNION AT CONNECTION TO UNIT.
- 3" SANITARY DROP, 3" SANITARY DOWN, 3" VENT RISE. PROVIDE CLEANOUT ON DROP
- 2" WATER METER AND REDUCE PRESSURE BACKFLOW PREVENTER
- 2" SUMP PUMP DISCHARGE RISE
- 2" VENT RISE, 1/2" HOT AND COLD WATER DROP
- 2" ELEVATOR SUMP PUMP DISCHARGE TO 3" WASTE STANDPIPE



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BASEMENT LEVEL
PLUMBING PLAN
EAST

P1.02



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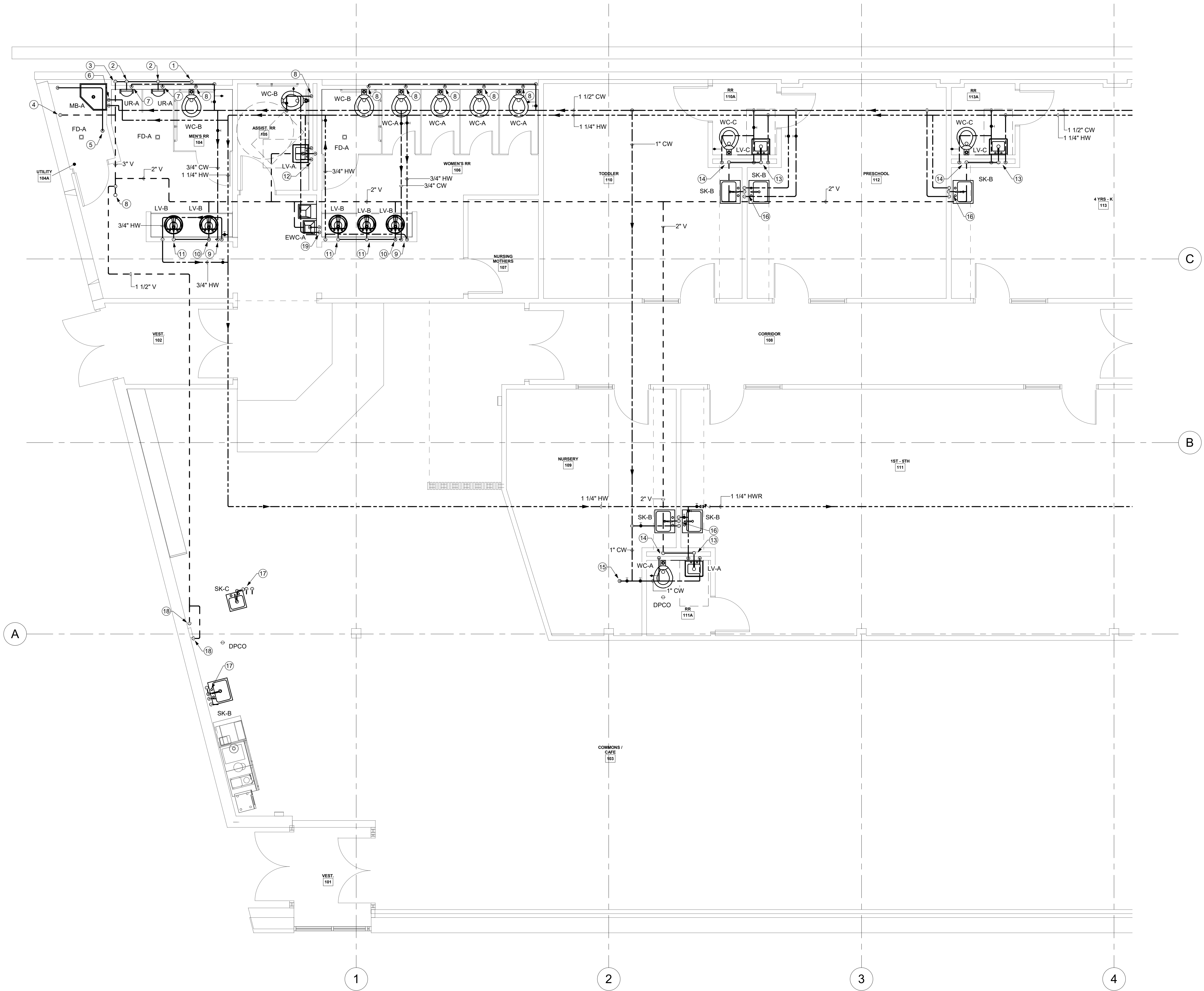
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FIRST FLOOR
PLUMBING PLAN
WEST

01.11

- 3" SANITARY DOWN
- 2-1/2" SANITARY DROP
- 3" SANITARY DROP, 3" VENT RISE
- 3" SANITARY DOWN, 3" VENT RISE, PROVIDE CLEANOUT AT BASE
- 3" NATURAL GAS UP
- 1/2" HOT AND COLD WATER DROP
- 3/4" COLD WATER DROP
- 1" COLD WATER DROP
- 3/4" HOT AND COLD WATER DROP, ROUTE BELOW COUNTER AND SUPPLY 1/2" HOT AND COLD WATER TO EACH FAUCET, CONTINUE 3/4" HOT WATER UNDER COUNTER AND RISE BACK UP TO HOT WATER MAIN FOR FULL CIRCULATION
- 1-1/2" SANITARY DROP, 2" SANITARY DOWN, 1-1/2" VENT RISE
- 1-1/2" SANITARY DROP, ROUTE IN WALL
- 1-1/2" SANITARY DROP, 2" SANITARY DOWN, 1-1/2" VENT RISE; 1/2" HOT AND COLD WATER DROP
- 1-1/2" SANITARY DROP, ROUTE IN WALL; 1/2" HOT AND COLD WATER DROP
- 2" SANITARY DROP, 2" SANITARY DOWN, 2" VENT RISE, 1" COLD WATER DROP
- 3/4" COLD WATER RISE TO FREEZE PROOF ROOF HYDRANT
- 2" SANITARY DOWN, 1-1/2" VENT RISE, 1/2" HOT AND COLD WATER DROP
- 1-1/2" SANITARY DROP, 2" SANITARY DOWN, 1-1/2" VENT RISE; 1/2" HOT AND COLD WATER DOWN
- 1-1/2" VENT RISE
- 1-1/2" SANITARY WITH P-TRAP DROP, 2" SANITARY DOWN, 1-1/2" VENT RISE, 1/2" COLD WATER DROP



1 FIRST FLOOR PLUMBING PLAN - WEST
1/4" = 1'-0"

P1.12 DRAWING NOTES

- 1 1-1/2" COLD WATER, 1-1/4" HOT WATER, 1" HOT WATER RETURN DOWN
2 3" VENT RISE, 3" VENT THROUGH ROOF
3 3" NATURAL GAS UP AND DOWN



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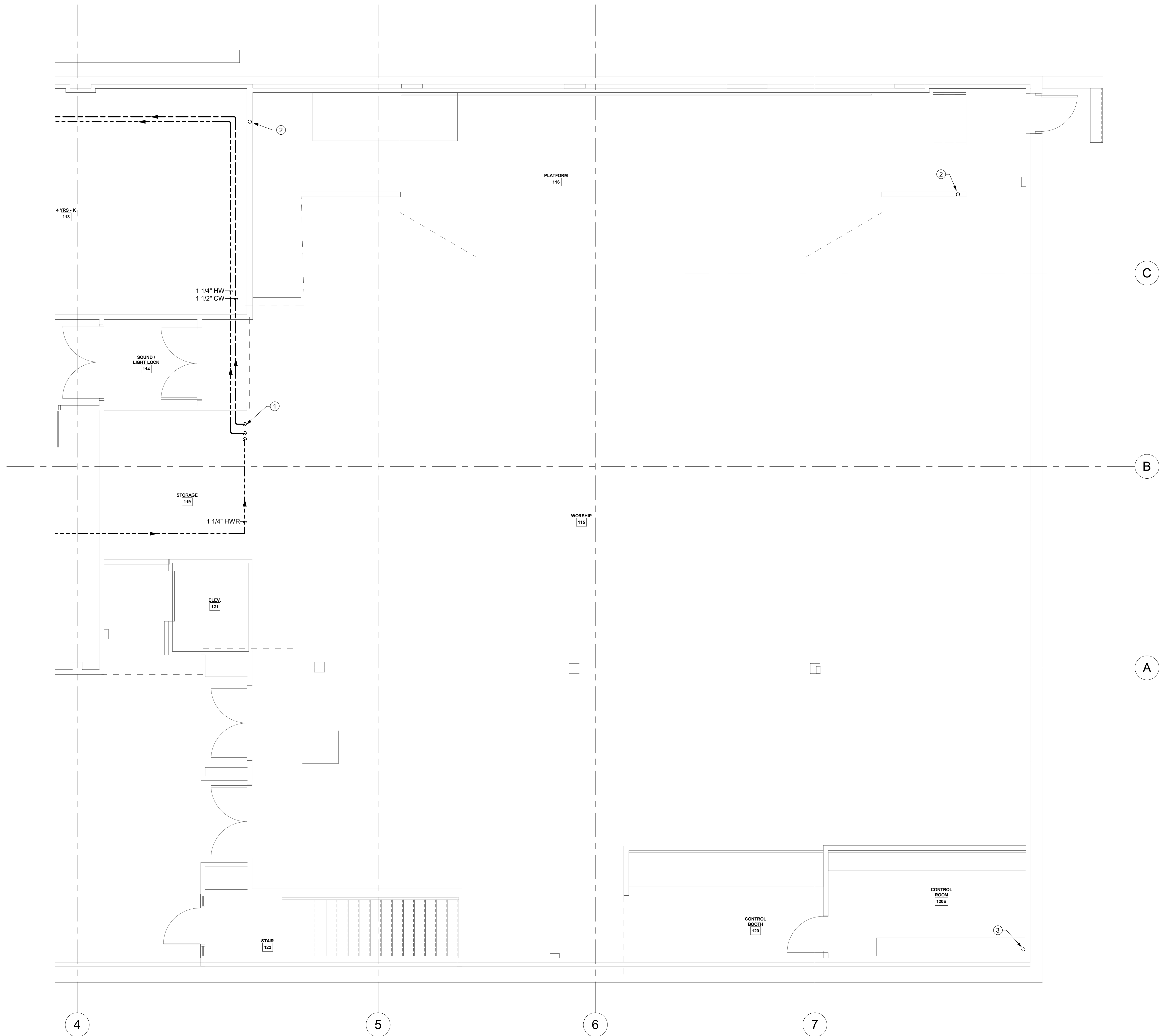
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FIRST FLOOR
PLUMBING PLAN
EAST

P1.12



1 FIRST FLOOR PLUMBING PLAN - EAST
1/4" = 1'-0"

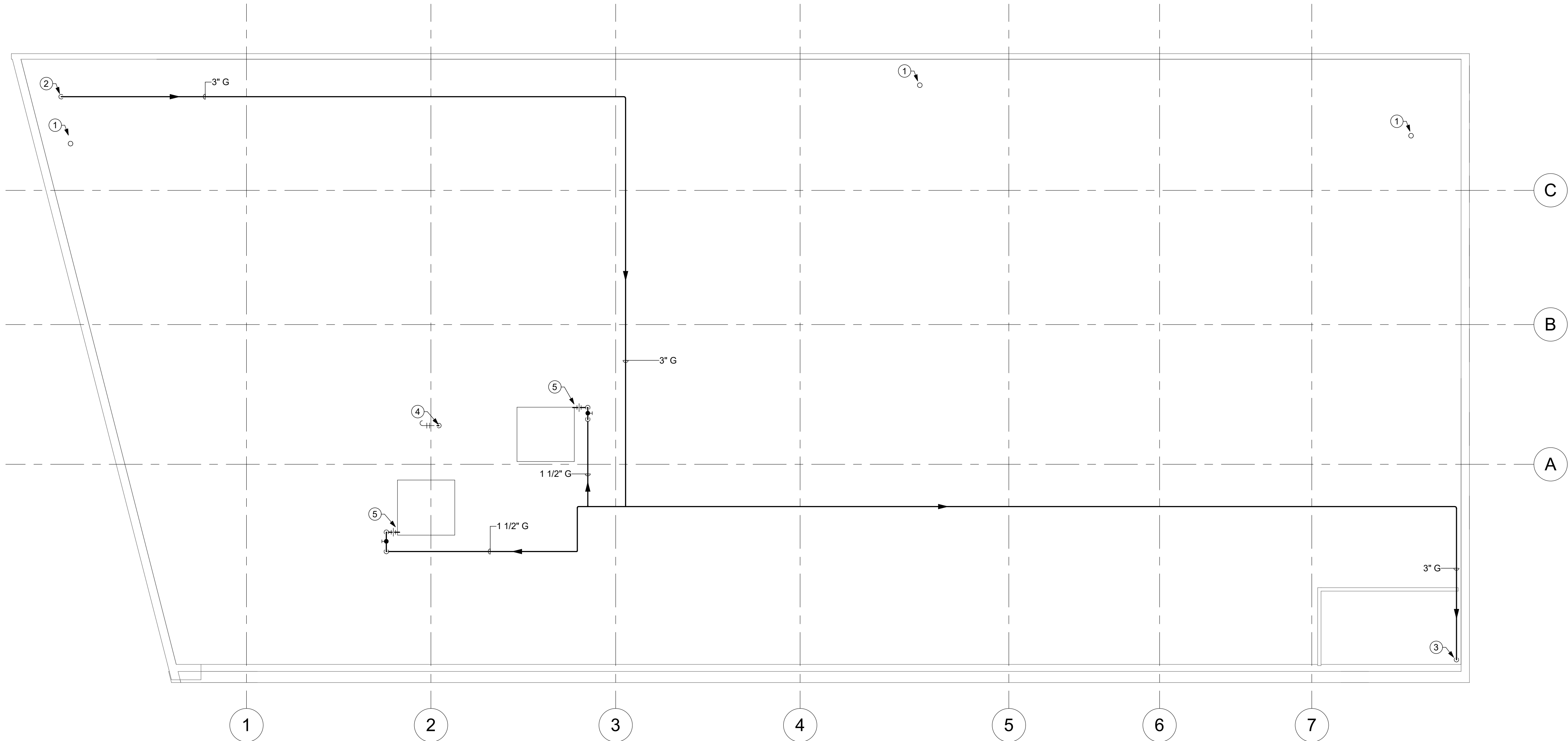


P1.21 DRAWING NOTES

- 1 3" VENT THROUGH ROOF
- 2 3" GAS RISE
- 3 3" GAS DOWN
- 4 3/4" CW RISE TO FROST FREE ROOF HYDRANT
- 5 1-1/2" NATURAL GAS CONNECTION TO HVAC EQUIPMENT. PROVIDE BALL VALVE AND DRIP LEG IN DROP AND UNION AT CONNECTION TO UNIT.



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1 ROOF LEVEL PLUMBING PLAN
1/8" = 1'-0"

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ROOF LEVEL
PLUMBING PLAN

P1.21

GENERAL NOTES - APPLICABLE TO ALL SHEETS

- A.

EXISTING CONDITIONS ARE TAKEN FROM FIELD OBSERVATIONS AND PRIOR CONSTRUCTION DOCUMENTS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BID.
- B.

DAMAGE TO EXISTING SYSTEMS (EQUIPMENT, PIPING, CONTROLS AND ACCESSORIES) SHOWN TO REMAIN AS A RESULT OF THE CONTRACTORS WORK IS THE RESPONSIBILITY OF THE CONTRACTOR. REPAIR AND/OR REPLACE WITH SIMILAR OR LIKE MATERIALS AT NO ADDITIONAL COST TO THE OWNER.
- C.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DISPOSE OF ALL DEMOLITION DEBRIS AND MATERIALS OFF SITE IN A PROPER LEGAL MANNER.
- D.

THE DEMOLITION DRAWINGS SHOW IN GENERAL MAJOR EQUIPMENT AND PIPING REMOVALS. THE INTENT IS NOT TO IDENTIFY ALL MISCELLANEOUS PIPING, PIPING ACCESSORIES, SUPPORTS, CONTROLS, CONTROL ACCESSORIES, CONTROL WIRING, AND CONDUIT TO BE DISCONNECTED AND REMOVED BUT IS THE REQUIREMENTS UNDER THIS CONTRACT.
- E.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ALLOW THE OWNER FIRST RIGHT OF REFUSAL TO RETAIN EQUIPMENT, INCLUDING CONTROL DEVICES, TO BE REMOVED. IF THE OWNER REFUSES TO RETAIN EQUIPMENT TO BE REMOVED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DISCONNECT AND REMOVE EQUIPMENT AND DISPOSE OF PROPERLY. IF THE OWNER PREFERS TO RETAIN THE EQUIPMENT, THE CONTRACTOR SHALL DISCONNECT AND REMOVE THE EQUIPMENT FROM THE EXISTING SYSTEMS IN GOOD WORKING CONDITION AND DELIVER (INCLUDING LOADING AND UNLOADING) TO A STORAGE AREA WITHIN THE BUILDING AS SELECTED BY THE OWNER. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR ANY EQUIPMENT DAMAGED DURING REMOVAL AND DELIVERY FOR STORAGE. ANY DAMAGE TO EQUIPMENT PRIOR TO DISCONNECTING SHOULD BE REPORTED TO THE OWNER'S REPRESENTATIVE. IF NOT REPORTED, THE CONTRACTOR TAKES FULL RESPONSIBILITY FOR REPAIRS TO THE EQUIPMENT.
- F.

IT IS THE RESPONSIBILITY OF THIS CONTRACT TO PATCH AND FINISH ALL EXISTING PENETRATIONS THROUGH FLOORS AND WALLS AFTER DEMOLITION.
- G.

EXISTING TEMPERATURE CONTROL EQUIPMENT, ACCESSORIES, WIRING OR CONDUIT THAT WILL NOT BE UTILIZED FOR THE INSTALLATION OR OPERATION OF THE NEW CONTROL EQUIPMENT SHALL BE DISCONNECTED AND REMOVED. NO EQUIPMENT, ACCESSORIES, WIRING OR CONDUIT SHALL BE ABANDONED IN PLACE. BEFORE DISCONNECTING POWER AND/OR COMMUNICATIONS OF DDC HARDWARE IN THE FIELD, ALL DDC DEVICES TO BE DEMOLISHED WILL BE CLEARED OF ALARMS, GRAPHICS, TRENDS, UNBUNDLED POINTS, PROGRAM, USER GROUPS, EVENT/SCHEDULES, REPORTS AND SYSTEM PROFILE.
- H.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL SHUTDOWNS OF SYSTEMS WITH THE OWNERS FACILITY PERSONNEL FOR TIE-IN CONNECTIONS. THE CONTRACTOR SHALL ASSIST THE OWNERS FACILITY PERSONNEL IN SHUTTING DOWN, DRAINING, VENTING, ETC. OF SYSTEM TO FACILITATE THE INTENDED WORK.
- I.

AFTER REMOVING PIPING PENETRATING FIRE-RATED CONSTRUCTION, PACK OPENING WITH APPROVED FIRE-RATED PACKING.
- J.

ALL DRAWINGS ARE SCHEMATIC. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL WORK. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF BUILDING STRUCTURAL ELEMENTS. COORDINATE ALL EQUIPMENT LOCATIONS, CONCEALMENT AND SURFACE FINISH TREATMENTS CAREFULLY WITH WORK OF ALL TRADES. IN ANY CASE OF DISCREPANCY BETWEEN THE PLANS OR IN ANY CASE WHERE SUCH ISSUES REQUIRE CLARIFICATION, NOTIFY ENGINEER IN WRITING.
- K.

ALL PIPING IS TO BE RUN CONCEALED IN FINISHED AREAS. COORDINATE PIPING INSTALLATION WITH WORK OF OTHER TRADES TO ENSURE CONCEALMENT.
- L.

COORDINATE ALL EQUIPMENT LOCATIONS AND INSTALLATION WITH THE WORK OF OTHER TRADES. COORDINATE EQUIPMENT WITH WALL, CEILING AND FLOOR FINISHES.
- M.

COORDINATE DIFFUSER LOCATIONS WITH LIGHTING, FIRE DETECTION, AND CEILING INSTALLERS. COORDINATE DUCT WORK WITH LIGHTING AND PIPING INSTALLERS TO ALLOW CLEARANCE FOR LIGHT FIXTURES, PIPING AND WORK OF OTHER TRADES.
- N.

COORDINATE LOUVER, DIFFUSER AND GRILLE FRAME TYPES TO MATE AND MATCH ADJACENT WALL AND CEILING CONSTRUCTION.
- O.

ALL SQUARE ELBOWS SHALL BE VANED, EXCEPT AS INDICATED ON PLANS.
- P.

ALL VOLUME DAMPERS SHALL BE INSTALLED WITH A SHAFT EXTENSION THAT EXCEEDS THE THICKNESS OF ASSOCIATED DUCT INSULATION.
- Q.

COORDINATE DUCTWORK WITH WORK OF OTHER TRADES TO ENSURE ALL DUCTWORK IS CONCEALED. COORDINATE EXACT DIFFUSER AND GRILLE LOCATIONS TO MATCH ARCHITECTURAL REQUIREMENTS FOR SPACING AND CENTERING.
- R.

PROVIDE MANUAL BALANCING DAMPERS FOR ALL DUCT BRANCHES SERVING SUPPLY AIR GRILLES, RETURN AIR GRILLES, AND EXHAUST AIR GRILLES NOT PROVIDED WITH OPPOSED BLADE BALANCING DAMPERS.
- S.

COORDINATE EXACT LOCATION OF ALL THERMOSTATS AND SPACE SENSORS WITH ENGINEER, ARCHITECT, AND CM.
- T.

PITCH ALL HYDRONIC PIPING UPWARD IN THE DIRECTION OF FLOW.
- U.

UNLESS OTHERWISE NOTED PROVIDE DRAINS AT LOW POINTS. DRAINS SHALL BE CONSTRUCTED WITH 3/4" BALL VALVE WITH HOSE CONNECTION AND END CAP.
- V.

UNLESS OTHERWISE NOTED PROVIDE VENTS AT HIGH POINTS. VENTS SHALL BE CONSTRUCTED WITH 1/2" BALL VALVE WITH HOSE CONNECTION AND END CAP.
- W.

COORDINATE ANY INTERRUPTION OF UTILITIES SERVICE WITH CONSTRUCTION MANAGER.
- X.

ALL PIPING AND DUCTWORK SIZES INDICATED ARE MINIMUM SIZES. LARGER SIZES MAY BE INSTALLED BY THE CONTRACTOR IN ALL CASES. EXISTING SURFACES OR SUBSTRATES WHICH ARE PENETRATED, ALTERED OR DAMAGED IN ANY WAY BY THE WORK OF THE CONTRACT SHALL BE REPAIRED SO AS TO MATCH ORIGINAL SURFACE OR SUBSTRATE.
- Y.

EXISTING SURFACES OR STRUCTURAL ELEMENTS IN THE EXISTING BUILDINGS WHICH ARE PENETRATED, ALTERED, OR DAMAGED IN ANY WAY BY THE WORK OF THIS MC CONTRACT SHALL BE REPAIRED SO AS TO MATCH THE ORIGINAL SURFACE OR STRUCTURE.
- Z.

ALL SURFACE MOUNTED EQUIPMENT SHALL BE FASTENED WITH ANCHORS OR FASTENERS AS SPECIFIED FOR THE SUBSTRATE. PLASTIC OR FIBER SHIELDS ARE NOT ACCEPTABLE.
- AA.

INSTALLATIONS SHALL MEET ALL APPLICABLE STATE AND LOCAL CODES.
- BB.

DO NOT SCALE DRAWINGS.
- CC.

ANY AND ALL WORK DONE ON THE ROOF CANNOT VOID EXISTING ROOF WARRANTY.

CONTROLS SCHEMATIC SYMBOL LIST			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	DIGITAL INPUT (GENERAL)		DUCT SMOKE DETECTOR
	DIGITAL OUTPUT (GENERAL)		CURRENT TRANSDUCER
	ANALOG INPUT (GENERAL)		ELECTRIC/PNEUMATIC TRANSDUCER
	ANALOG OUTPUT (GENERAL)		ELECTRONIC/ELECTRIC TRANSDUCER
	THERMOWELL		ELECTRICAL INTERFACE
	ALARM		START/STOP
	ELECTRIC ACTUATOR		OPEN/CLOSE
	FREEZE-STAT		ENABLE/DISABLE
	HUMIDIFIER		HARD WIRE INTERFACE
	RELAY		ELECTRONIC INTERFACE
	STATUS		PNEUMATIC CONTROL VALVE (3-WAY)
	FLOW METER		PNEUMATIC CONTROL VALVE (2-WAY)
	BTU ENERGY METER		ELECTRIC/ELECTRONIC CONTROL VALVE (3-WAY)
	AIR FLOW MEASURING STATION		ELECTRIC/ELECTRONIC CONTROL VALVE (2-WAY)
	AVERAGING SENSOR		SOLENOID VALVE
	HUMIDITY SENSOR (DUCT MOUNTED)		THERMOSTATIC EXPANSION VALVE
	TEMPERATURE SENSOR (DUCT OR PIPE MOUNTED)		AUTOMATIC AIR DAMPER (PARALLEL BLADE)
	CARBON DIOXIDE SENSOR (DUCT MOUNTED)		AUTOMATIC AIR DAMPER (OPPOSED BLADE)
	SPACE TEMPERATURE SENSOR (WALL MOUNTED)		PNEUMATIC ACTUATOR
	SPACE HUMIDITY SENSOR (WALL MOUNTED)		MAIN TEMPERATURE CONTROL AIR SOURCE
	CARBON DIOXIDE ROOM SENSOR (WALL MOUNTED)		EXHAUST AIR
	CARBON MONOXIDE ROOM SENSOR (WALL MOUNTED)		OUTSIDE AIR
	NITROGEN DIOXIDE ROOM SENSOR (WALL MOUNTED)		RETURN AIR
	THERMOSTAT		SUPPLY AIR
	OCCUPANCY SENSOR		SUPPLY FAN
	MOISTURE SENSOR		SMOKE CONTROL FAN
	PROBE SENSOR		RETURN AIR FAN
	FLOW SENSOR/SWITCH		EXHAUST AIR FAN
	END SWITCH		FILTER
	MANUAL SWITCH		BASE MOUNTED PUMP
	DIFFERENTIAL STATIC PRESSURE SWITCH		IN LINE PUMP
	ELECTRIC/PNEUMATIC SWITCH OR RELAY		ADJUSTABLE SPEED DRIVE
	PNEUMATIC/ELECTRIC SWITCH OR RELAY		COOLING COIL
	FLOW TRANSMITTER TRANSDUCER		HEATING COIL
	PRESSURE SENSOR		HEAT RECOVERY COIL
	BACKDRAFT DAMPER		REFRIGERANT R134a SENSOR (WALL MOUNTED)
	VAV SCR CONTROL		TIMECLOCK SIGNAL

HVAC SYMBOL LIST			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EXISTING WORK TO BE REMOVED		COMPRESSED AIR
	POINT OF CONNECTION		VENT
	POINT OF DISCONNECTION		BOILER BLOW DOWN
	DRAWING KEYNOTE		CONDENSER WATER SUPPLY
	DEMOLITION KEYNOTE		CONDENSER WATER RETURN
	THOUSAND BTU/HOUR		CHILLED WATER SUPPLY
	NOT TO SCALE		CHILLED WATER RETURN
	EXISTING		DRAIN
	ACOUSTIC THERMAL LINING - 1-1/2" THICK		FUEL OIL FILL
	ACOUSTIC THERMAL LINING - 2" THICK		FUEL OIL GAUGE
	DOUBLE WALL LINED DUCT		FUEL OIL SUPPLY
	FEET PER MINUTE		FUEL OIL RETURN
	CUBIC FEET PER MINUTE		FUEL OIL TANK VENT
	ABOVE FINISHED FLOOR		GAS
	ACCESS DOOR		GLYCOL SUPPLY
	WALL TO WALL		GLYCOL RETURN
	GENERAL CONTRACTOR		HEAT PUMP WATER SUPPLY
	MECHANICAL CONTRACTOR		HEAT PUMP WATER RETURN
	PLUMBING CONTRACTOR		HOT WATER SUPPLY
	ELECTRICAL CONTRACTOR		HOT WATER RETURN
	NORMALLY OPEN		LOW PRESSURE STEAM
	NORMALLY CLOSED		LOW PRESSURE CONDENSATE
	FLEXIBLE DUCTWORK		MEDIUM PRESSURE STEAM
	DUCT SECTION - FLAT OVAL (FO)		MEDIUM PRESSURE CONDENSATE
	ROUND DUCT - 12"		HIGH PRESSURE STEAM
	DUCT SECTION - SUPPLY		HIGH PRESSURE CONDENSATE
	DUCT SECTION - RETURN		PUMPED CONDENSATE
	WIDTH A x DEPTH B		REFRIGERANT DISCHARGE
	TRANSITION SQUARE TO ROUND		REFRIGERANT LIQUID
	RISE IN DUCT - IN DIRECTION OF AIRFLOW		REFRIGERANT SUCTION
	DROP IN DUCT - IN DIRECTION OF AIRFLOW		HOT GAS
	SUPPLY DUCT TURNING UP OR DOWN		VACUUM
	RETURN DUCT TURNING UP OR DOWN		DOMESTIC COLD WATER
	6" BOOT TAP		TRIPLE DUTY VALVE
	14x8" RECTANGULAR MAIN RECTANGULAR BRANCH		GLOBE VALVE
	6" BOOT TAP		BALL VALVE
	14" RECTANGULAR MAIN ROUND BRANCH		GATE VALVE
	CONICAL TEE		CONTROL VALVE
	LATERAL		THREE WAY CONTROL VALVE
	MITERED ELBOW WITH TURNING VANES		CHECK VALVE
	SUPPLY DIFFUSER, REGISTER OR GRILLE		BALANCING VALVE
	RETURN REGISTER		BUTTERFLY VALVE
	EXHAUST GRILLE		RELIEF VALVE
	FIN TUBE RADIATION		PRESSURE REDUCING VALVE
	VALANCE		PRESSURE/TEMPERATURE TEST PLUG
	REGISTER, GRILLE OR DIFFUSER TAG		SINGLE LINE PIPE CONTINUED
	LINEAR DIFFUSER TAG		DOUBLE LINE PIPE OR ROUND DUCT CONTINUED
	VOLUME DAMPER (VD)		DOUBLE LINE RECTANGULAR DUCT CONTINUED
	SUCTION DIFFUSER		AIR FLOW
	FLEXIBLE CONNECTOR - PIPING		PIPE ANCHOR
	DRAIN VALVE WITH HOSE CONNECTION, CAP AND CHAIN		PIPE GUIDE
	WATER TEMPERATURE SENSOR		EXPANSION COMPENSATOR WITH GUIDES
	STATIC PRESSURE SENSOR		PRE-FAB EXPANSION LOOP
	HUMIDISTAT		STRAINER
	TEMPERATURE SENSOR		PRESSURE GAUGE
	CARBON DIOXIDE SENSOR		THERMOMETER
	CARBON MONOXIDE SENSOR		UNION
	GAS SENSOR		AIR VENT
	PNEUMATIC/ELECTRIC THERMOSTAT		THERMOSTATIC TRAP
	THERMOSTAT/SENSOR WITH GUARD		FLOAT & THERMOSTATIC TRAP
	DUCT SMOKE DETECTOR		THERMODYNAMIC TRAP
			BUCKET TRAP
			DIRECTION OF FLOW
			REDUCER
			CAP OR PLUG
			ELBOW DOWN
			ELBOW UP
			BOTTOM TAP
			AUTOMATIC AIR DAMPER
			FIRE DAMPER
			SMOKE DAMPER
			COMBINATION FIRE/SMOKE DAMPER
			BACK DRAFT DAMPER
			FLEX CONNECTOR - DUCTWORK
			MOTORIZED DAMPER
			BLAST GATE
			VOLUME DAMPER (VD)
			SUCTION DIFFUSER
			FLEXIBLE CONNECTOR - PIPING
			DRAIN VALVE WITH HOSE CONNECTION, CAP AND CHAIN
			WATER TEMPERATURE SENSOR
			STATIC PRESSURE SENSOR
			HUMIDISTAT
			TEMPERATURE SENSOR
			CARBON DIOXIDE SENSOR
			CARBON MONOXIDE SENSOR
			GAS SENSOR
			PNEUMATIC/ELECTRIC THERMOSTAT
			THERMOSTAT/SENSOR WITH GUARD
			DUCT SMOKE DETECTOR



LIFE Church, NY
275 Mamaroneck Ave. Mamaroneck, NY 10543
03.03.21

Revisions
No. Description Date

Owner

275 Mamaroneck Ave.
Mamaroneck, NY 10543

Project Number

20007

Date

03.03.21

MECH. LEGEND,
SYMBOLS LIST,
AND GENERAL
NOTES

M0.00

GENERAL REMOVALS NOTES

- A. MECHANICAL SYSTEMS WITHIN THE SHADED PORTION OF THE PLANS BELOW SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING THOSE LOCATED ON THE ROOF.
- B. ALL EXISTING MECHANICAL SYSTEMS INCLUDING DUCTWORK, DUCTWORK INSULATION, FLUES, AIR TERMINALS, DAMPERS, DUCT ACCESSORIES, COILS, PIPING, PIPING INSULATION, VALVES, PIPING ACCESSORIES, MECHANICAL EQUIPMENT, MECHANICAL EQUIPMENT SUPPORTS/PADS, CONTROLS (REMOVED IN THEIR ENTIRETY), ETC. INCLUDING THOSE ON THE ROOF.
- C. IF ROOF EQUIPMENT IS REMOVED AND AN OPENING RESULTS IN THE ROOF SYSTEM, PATCH AND REPAIR TO MATCH SURROUNDING ROOF CONDITIONS.



LIFE Church, NY
275 Mamaroneck Ave. Mamaroneck, NY 10543
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Revisions		
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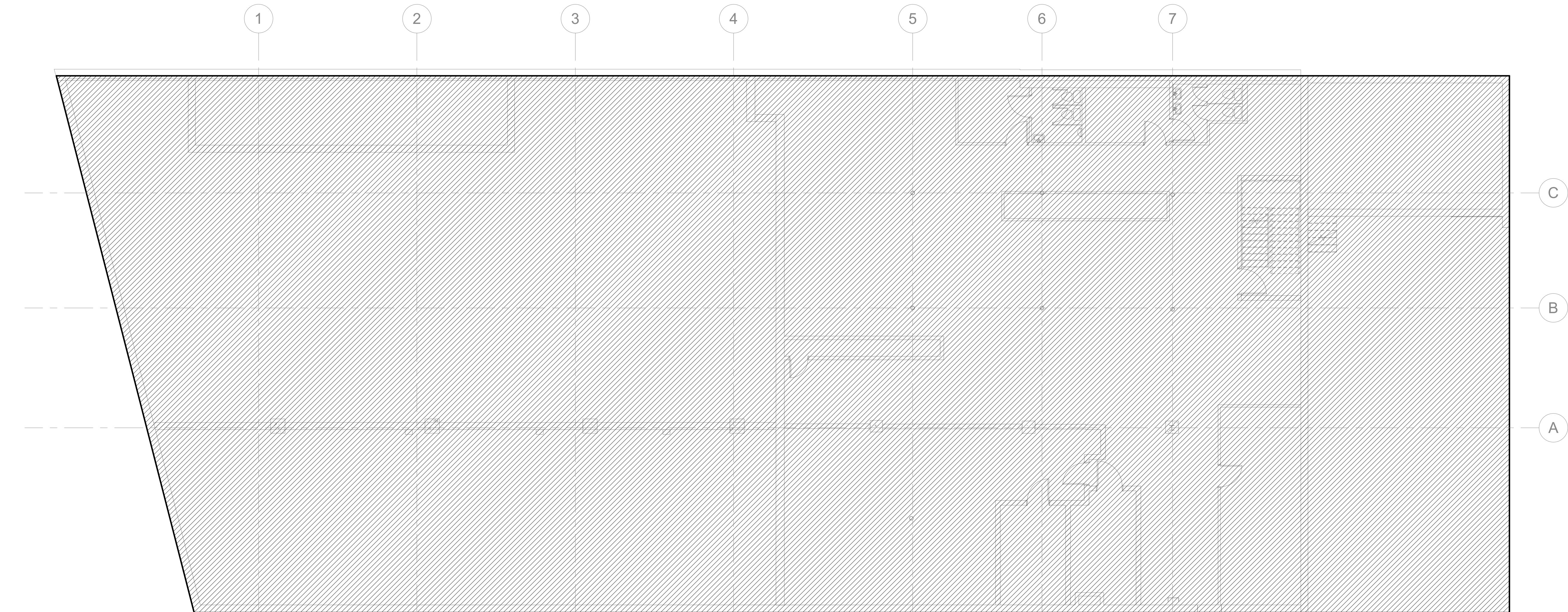
Date
03.03.21

MECHANICAL
REMOVALS PLAN

MD1.10



2 FIRST FLOOR MECHANICAL REMOVALS PLAN
1/8" = 1'-0"



1 BASEMENT FLOOR MECHANICAL REMOVALS PLAN
1/8" = 1'-0"



VENTILATION ABBREVIATION DEFINITIONS	
ABBREVIATION	DEFINITION
AFP	PEOPLE OUTDOOR AIRFLOW RATE IN BREATHING ZONE (CFM/PERSON)
AFSF	AREA OUTDOOR AIRFLOW RATE IN BREATHING ZONE (CFM/SQ.FT.)
Vbz	OUTDOOR AIRFLOW RATE REQUIRED IN THE BREATHING ZONE
Ez	ZONE AIR DISTRIBUTION EFFECTIVENESS
Voz	ZONE OUTDOOR AIRFLOW RATE
Vpz	PRIMARY AIRFLOW: THE AIRFLOW RATE SUPPLIED TO THE ZONE FROM THE AIR HANDLING UNIT AT WHICH THE OUTDOOR AIR INTAKE IS LOCATED. IT INCLUDES OUTDOOR INTAKE AIR AND RECIRCULATED AIR FROM THAT AIR HANDLING UNIT BUT DOES NOT INCLUDE AIR TRANSFERRED OR AIR RECIRCULATED TO THE ZONE BY OTHER MEANS. FOR DESIGN PURPOSES, VPZ SHALL BE THE ZONE DESIGN PRIMARY AIRFLOW RATE. EXPECT FOR ZONES WITH VARIABLE AIR VOLUME SUPPLY AND VPZ SHALL BE THE LOWEST EXPECTED PRIMARY AIRFLOW TO THE ZONE WHEN IT IS FULLY OCCUPIED.
Zp	PRIMARY OUTDOOR AIR FRACTION
Vps	SYSTEM PRIMARY AIRFLOW
Vot	SYSTEM OUTDOOR AIR INTAKE FLOW RATE
Vou	UNCORRECTED OUTDOOR AIR INTAKE FLOW RATE
D	OCCUPANT DIVERSITY: THE RATIO OF THE SYSTEM POPULATION TO THE SUM OF THE ZONE POPULATIONS.
Ev	SYSTEM VENTILATION EFFICIENCY
AF Fixture (High Rate)	EXHAUST AIRFLOW RATE (CFM/SQ.FT.), THE HIGH EXHAUST RATE, IT SHALL BE PROVIDED WHERE THE EXHAUST SYSTEM IS DESIGNED TO OPERATE INTERMITTENTLY.
AF Fixture (Low Rate)	EXHAUST AIRFLOW RATE (CFM/SQ.FT.), THE LOW EXHAUST RATE, IT SHALL BE PERMITTED ONLY WHERE THE EXHAUST SYSTEM IS DESIGNED TO OPERATE CONTINUOUSLY WHILE OCCUPIED.
Va	NATURAL VENTILATION MINIMUM OPENABLE AREA TO THE OUTDOORS

VENTILATION CALCULATIONS - ERV-0-1

SYSTEM VALUES:																					
System Primary Air Flow (Vps):				1000	OA %:	100.0	D:	1.00	DESIGN MEETS AUTHORITY:				YES								
System Outdoor Air Flow (Vot):				1000	Vou:	759	Ev:	-													
ZONE IDENTIFICATION						BASE CASE PER AUTHORITY						DESIGN CASE				ADDITIONAL INFO					
ROOM NUMBER	ROOM NAME	ZONE EQUIP. TAG #	OCCUPANCY CLASSIFICATION	AREA (SF)	ZONE OCCU. (ZO)	AFP (cfm)	AFSF (cfm)	Vbz (cfm)	Ez	Voz (cfm)	Vpz (cfm)	Zp	Voz (cfm)	DESIGN MEETS AUTHORITY	EXHAUST REQUIRED	DCV REQUIRED	CO2 SENSOR PROVIDED	OCCU. SENSOR PROVIDED	NOTES		
B101	STAIR	0	Corridor	170	0	0.0	0.06	10	0.8	13	15	0.87	15	YES							
B102	LOBBY	0	Lobby - Office	615	7	5.0	0.06	72	0.8	90	100	0.90	100	YES							
B103	CLASSROOM	0	Conference Room	879	45	5.0	0.06	278	0.8	348	350	0.99	350	YES							
B105	CORRIDOR	0	Corridor	197	0	0.0	0.06	12	0.8	15	20	0.75	20	YES							
B106	MEN	0	Toilet Room - Public	68	0	0.0	0.00	0	0.8	0	0	0.00	0	YES	YES						
B107	WOMEN	0	Toilet Room - Public	68	0	0.0	0.00	0	0.8	0	0	0.00	0	YES	YES						
B108	CORRIDOR	0	Corridor	258	0	0.0	0.06	15	0.8	20	20	1.00	20	YES							
B109	VESTIBULE	0	Corridor	34	0	0.0	0.06	2	0.8	3	5	0.60	5	YES							
B110	GREEN ROOM	0	Conference Room	486	26	5.0	0.06	159	0.8	199	205	0.97	205	YES							
B111	RESTROOM	0	Toilet Room - Public	96	0	0.0	0.00	0	0.8	0	0	0.00	0	YES	YES						
B114	CORRIDOR	0	Corridor	209	0	0.0	0.06	13	0.8	16	20	0.80	20	YES							
B115	OFFICE	0	Office Space	132	2	5.0	0.06	18	0.8	23	25	0.92	25	YES							
B116	OFFICE	0	Office Space	133	2	5.0	0.06	18	0.8	23	25	0.92	25	YES							
B117	OFFICE	0	Office Space	168	2	5.0	0.06	20	0.8	26	30	0.87	30	YES							
B118	COPY/PRINT/FAX	0	Copy/Printing Room	118	1	5.0	0.06	12	0.8	16	20	0.80	20	YES	YES						
B119	OPEN OFFICE	0	Office Space	382	7	5.0	0.06	58	0.8	73	75	0.97	75	YES							
B120	VOLUNTEERS	0	Office Space	363	10	5.0	0.06	72	0.8	90	90	1.00	90	YES							
B104	STORAGE/RESOURCE RM	0		145	0	0.0	0.00	0	0.8	0	0	0.00	0	YES							
B104A	MECHANICAL SPRINKLER	0		180	0	0.0	0.00	0	0.8	0	0	0.00	0	YES							
B112	ELEC/DATA/IT	0		186	0	0.0	0.00	0	0.8	0	0	0.00	0	YES							
B117A	STORAGE	0		16	0	0.0	0.00	0	0.8	0	0	0.00	0	YES							

VENTILATION CALCULATIONS - RTU-1-1

SYSTEM VALUES:																			
System Primary Air Flow (Vps):				2645	OA %:	59.9	D:	1.00	DESIGN MEETS AUTHORITY:				YES						
System Outdoor Air Flow (Vot):				1584	Vou:	915	Ev:	0.75											
ZONE IDENTIFICATION						BASE CASE PER AUTHORITY					DESIGN CASE				ADDITIONAL INFO				
ROOM NUMBER	ROOM NAME	ZONE EQUIP. TAG #	OCCUPANCY CLASSIFICATION	AREA (SF)	ZONE OCCU. (ZO)	AFP (cfm)	AFSF (cfm)	Vbz (cfm)	Ez	Voz (cfm)	Vpz (cfm)	Zp	Voz (cfm)	DESIGN MEETS AUTHORITY	EXHAUST REQUIRED	DCV REQUIRED	CO2 SENSOR PROVIDED	OCCU SENSOR PROVIDED	NOTES
108	CORRIDOR	VAV-1-2	Corridor	375	0	0.0	0.06	23	0.8	29	125	0.23	75	YES					
109	NURSERY	VAV-1-2	Day Care (Through Age 4)	270	7	10.0	0.18	119	0.8	149	250	0.60	150	YES					
110	TODDLER	VAV-1-1	Day Care (Through Age 4)	309	8	10.0	0.18	136	0.8	170	285	0.60	171	YES					
111	1ST-5TH	VAV-1-2	Classroom (Age 5-8)	631	21	10.0	0.12	310	0.8	388	650	0.60	389	YES		YES			
112	PRESCHOOL	VAV-1-1	Day Care (Through Age 4)	309	8	10.0	0.18	136	0.8	170	285	0.60	171	YES					
113	4 YRS-K	VAV-1-1	Classroom (Age 5-8)	494	13	10.0	0.12	189	0.8	237	400	0.59	240	YES					
114	SOUND/LIGHT LOCK	VAV-1-2	Corridor	56	0	0.0	0.06	3	0.8	5	20	0.25	12	YES					
101	VESTIBULE	EUH-1-7		56	0	0.0	0.00	0	0.8	0	0	0.00	0	YES					
102	VESTIBULE	EUH-1-6		61	0	0.0	0.00	0	0.8	0	0	0.00	0	YES					
104	MEN'S RR	VAV-1-3	Toilet Room - Public	226	0	0.0	0.00	0	0.8	0	250	0.00	150	YES	YES				
104A	UTILITY	EUH-1-1		33	0	0.0	0.00	0	0.8	0	0	0.00	0	YES					
105	ASSIST. RR	EUH-1-2	Toilet Room - Public	65	0	0.0	0.00	0	0.8	0	0	0.00	0	YES	YES				
106	WOMEN'S RR	VAV-1-3	Toilet Room - Public	303	0	0.0	0.00	0	0.8	0	250	0.00	150	YES	YES				
107	NURSING MOTHERS	VAV-1-3		53	0	0.0	0.00	0	0.8	0	55	0.00	33	YES					
110A	RR	EUH-1-3	Toilet Room - Public	43	0	0.0	0.00	0	0.8	0	0	0.00	0	YES	YES				
111A	RR	-	Toilet Room - Public	43	0	0.0	0.00	0	0.8	0	0	0.00	0	YES	YES				
113A	RR	EUH-1-4	Toilet Room - Public	43	0	0.0	0.00	0	0.8	0	0	0.00	0	YES	YES				
119	STORAGE	VAV-1-2		146	0	0.0	0.00	0	0.8	0	75.000	0	45	YES					

VENTILATION CALCULATIONS - RTU-1-2

SYSTEM VALUES:																			
System Primary Air Flow (Vps):				3205	OA %:	26.6	D:	1.00	DESIGN MEETS AUTHORITY:				YES						
System Outdoor Air Flow (Vot):				854	Vou:	683	Ev:	0.95											
ZONE IDENTIFICATION				BASE CASE PER AUTHORITY							DESIGN CASE				ADDITIONAL INFO				
ROOM NUMBER	ROOM NAME	ZONE EQUIP. TAG #	OCCUPANCY CLASSIFICATION	AREA (SF)	ZONE OCCU. (ZO)	AFP (cfm)	AFSP (cfm)	Vbz (cfm)	Ez	Voz (cfm)	Vpz (cfm)	Zp	Voz (cfm)	DESIGN MEETS AUTHORITY	EXHAUST REQUIRED	DCV REQUIRED	CO2 SENSOR PROVIDED	OCCU. SENSOR PROVIDED	NOTES
103	COMMONS/CAFÉ	RTU-1-2	Lobby - Office	3051	100	5.0	0.06	683	0.8	854	3205.000	0	854	YES		YES			

VENTILATION CALCULATIONS- AHU-1-1

SYSTEM VALUES:																			
System Primary Air Flow (Vps):				8100	OA %:		145.0	D:		1.00	DESIGN MEETS AUTHORITY:				YES				
System Outdoor Air Flow (Vot):				3644	Vou:		2924.14	Ev:		0.91									
ZONE IDENTIFICATION						BASE CASE PER AUTHORITY						DESIGN CASE				ADDITIONAL INFO			
ROOM NUMBER	ROOM NAME	ZONE EQUIP. TAG #	OCCUPANCY CLASSIFICATION	AREA (SF)	ZONE OCCU. (ZO)	AFP (cfm)	AFSF (cfm)	Vbz (cfm)	Ez	Voz (cfm)	Vpz (cfm)	Zp	Voz (cfm)	DESIGN MEETS AUTHORITY	EXHAUST REQUIRED	DCV REQUIRED	CO2 SENSOR PROVIDED	OCCU. SENSOR PROVIDED	NOTES
115/120	WORSHIP/CONTROL	AHU-1-1	Place of Worship	4423	526	5.0	0.06	2895	0.8	3620	8100	0.45	3644	YES		YES			
120B	CONTROL ROOM	IDU-1-1	Computer (w/o Printing)	146	4	5.0	0.06	29	0.8	36	100	0.36	45	YES					



LIFE Church, NY

275 Mamaroneck Ave. Mamaroneck, NY 10543

03.03.21

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Description	Date

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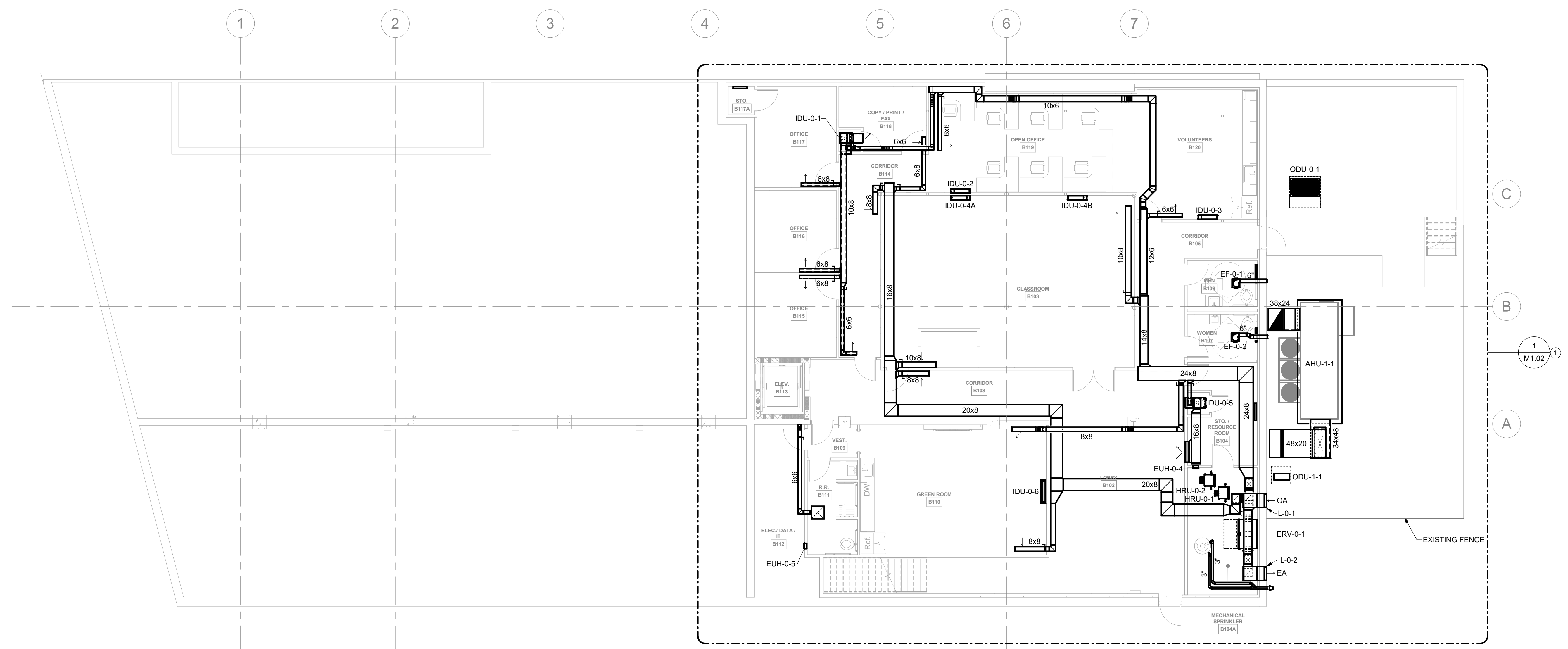
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BASEMENT FLOOR FULL DUCTWORK PLAN

M1.01



- 1 DUCTWORK TO BE MOUNTED AS TIGHT AS POSSIBLE TO STRUCTURE. COORDINATE
- 2 MOUNTING HEIGHT WITH ALL SERVICES IN AREA.
- 3 DUCTWORK TO BE ROUTED UP WITHIN THE JOIST SPACING IN THIS AREA.
- 4 SEE VIEW 2 ON SHEET M3.01 FOR ADDITIONAL DETAIL ON UNIT ORIENTATION.
- 5 SEE VIEW 3 ON SHEET M3.01 FOR ADDITIONAL DETAIL ON UNIT ORIENTATION.
- 6 SEE VIEW 1 ON SHEET M3.01 FOR ADDITIONAL DETAIL ON UNIT ORIENTATION.
- 7 COORDINATE LOCATION OF FAN WITHIN BATHROOM WITH ALL TRADES ABOVE CEILING.
- 8 COORDINATE WITH MANUFACTURERS INSTRUCTIONS TO INSTALL WITHIN CEILING.
- 9 PROVIDE COOK MODEL WCR-S WALL CAP WITH INTEGRAL WIND GUARD ON THE OUTSIDE
- 10 WALL.
- 11 EUH TO BE INSTALLED WITH INTEGRAL TAMPOR RESISTANT THERMOSTAT.
- 12 SEE M2.02 FOR PIPING ROUTING AND THERMOSTAT LOCATION.
- 13 GRILLE MOUNTED TO SIDE OF DUCTWORK.
- 14 LOCATE LOUVER AS HIGH ON WALL AS POSSIBLE. SEE DETAIL FOR ADDITIONAL
- 15 INFORMATION.
- 16 UNIT TO BE MOUNTED ON GALVANIZED STEEL STAND TO SUPPORT THE UNIT A MINIMUM
- 17 OF 18" ABOVE GROUND LEVEL.
- 18 FRESH AIR DUCTWORK TO SUPPORT THE BUILDING SHALL BE ROUTED SUCH THAT THE
- 19 INSTALLATION OF THE DUCT HEATER CAN BE INSTALLED AND BE ACCESSIBLE FROM THE
- 20 FRONT OF THE UNIT.

14 40X20 SUPPLY DUCT RUN UP THE OUTSIDE WALL. SEE CONTINUATION ON SHEET M1.13.

15 36X24 RETURN DUCT RUN UP THE OUTSIDE WALL. SEE CONTINUATION ON SHEET M1.13.

16 6X6 EXHAUST DUCT RUN UP TO THE FLOOR ABOVE. SEE CONTINUATION ON SHEET M1.12.

17 AIR HANDLING UNIT TO BE MOUNTED ON STEEL SUPPORTS TO SUPPORT THE UNIT 18" OFF THE GROUND. COORDINATE WITH STRUCTURAL ENGINEER'S PLANS.

18 CONCENTRIC VENT KIT FOR HOT WATER HEATER FLUE/FRESH AIR.

19 GAS FIRED WATER HEATER BY PC.

20 MOUNT RETURN GRILLE SUCH THAT THE BLADES ARE ANGLED TOWARDS THE FLOOR.

21 GRILLE TO BE MAINTAINED ON SIDE OF DUCT FACING INTO THE ROOM.

22 THE BLADES OF THE GRILLE SHALL BE TURNED "HORIZONTALLY 45°" SUCH THAT THE AIRFLOW TURNS INTO THE ROOM AND NOT DIRECTLY TOWARDS THE EXHAUST GRILLE ON THE OPPOSITE WALL.

23 UNIT MOUNTED WITHIN LOADING DOCK. UNIT TO BE MOUNTED ON GALVANIZED STEEL STAND TO SUPPORT THE UNIT A MINIMUM OF 18" ABOVE THE LOADING DOCK. SEE SECTION ON SHEET M3.01.

24 GRILLE BLADES SHOULD BE SPACED TO THROW AIR THOROUGHOUT THE LOBBY IN OPPOSING DIRECTIONS 45° AS APPLICATED.

25 BALANCE BRANCH CONNECTING IDU-0.4 TO 155 CFM.

26 BALANCE BRANCH CONNECTING IDU-0.1 TO 100 CFM.

27 PROVIDE FLEXIBLE CONNECTION AT ALL DUCTWORK CONNECTION POINTS.

28 DUCTWORK CONSTRUCTION TO BE EXTERIOR DOUBLE WALL DUCTWORK PER CONNECTIONS.

29 DUCTWORK TO BE LINED WITH "F" FIBERGLASS LINING. DUCT SIZE SHOWN SHALL BE THE FREE AREA WITHIN THE LINING.



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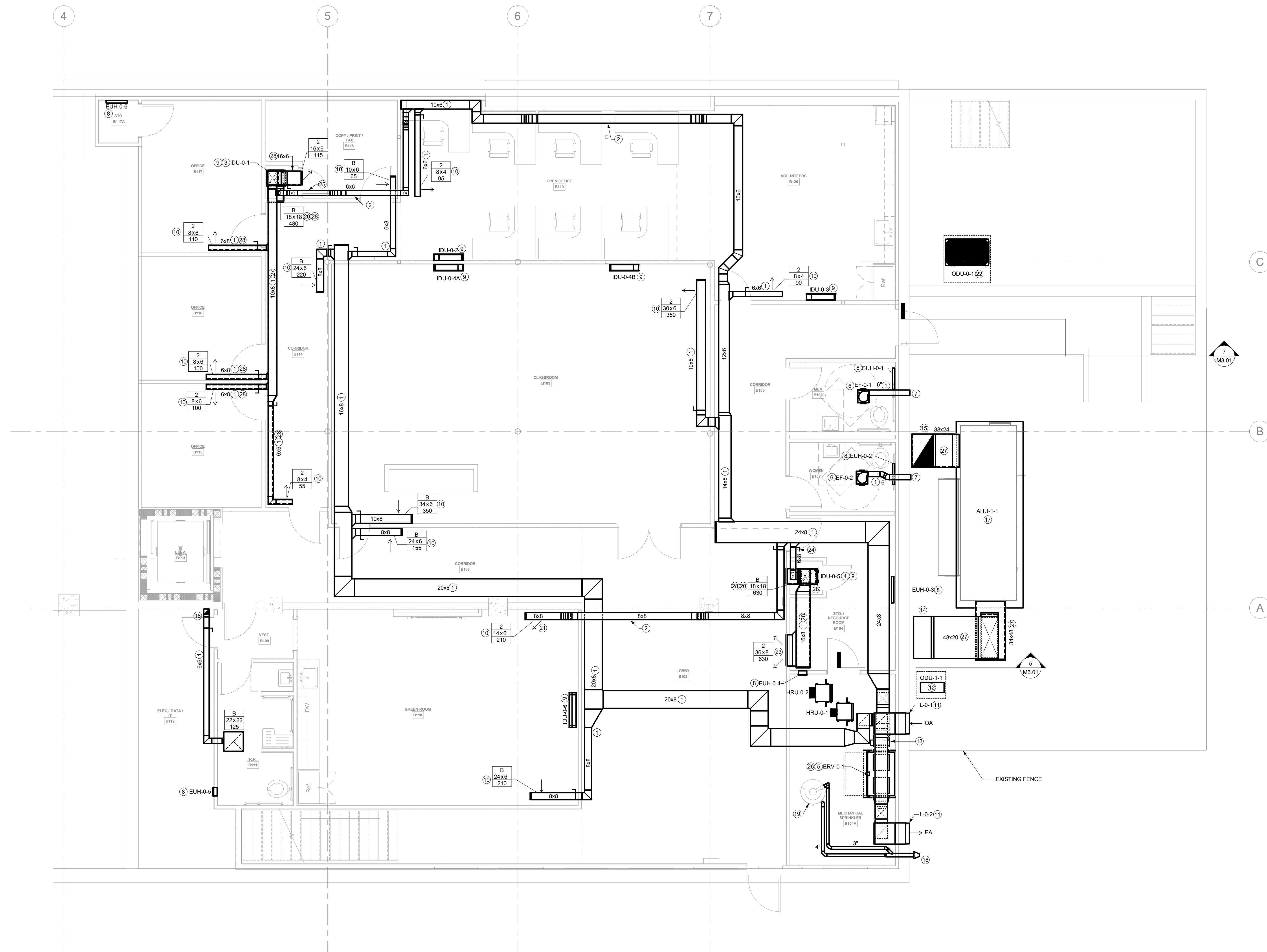
BASEMENT FLOOR

PARTIAL

DUCTWORK PLAN

M1.02

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1 BASEMENT FLOOR PARTIAL DUCTWORK PLAN
1/4" = 1'-0"

M1.11 DRAWING NOTES

1 FOR VISIBILITY, SOME TAGS AND NOTES ARE NOT SHOWN ON THIS SHEET. SEE SHEETS M1.12 AND M1.13 FOR ADDITIONAL DETAIL.



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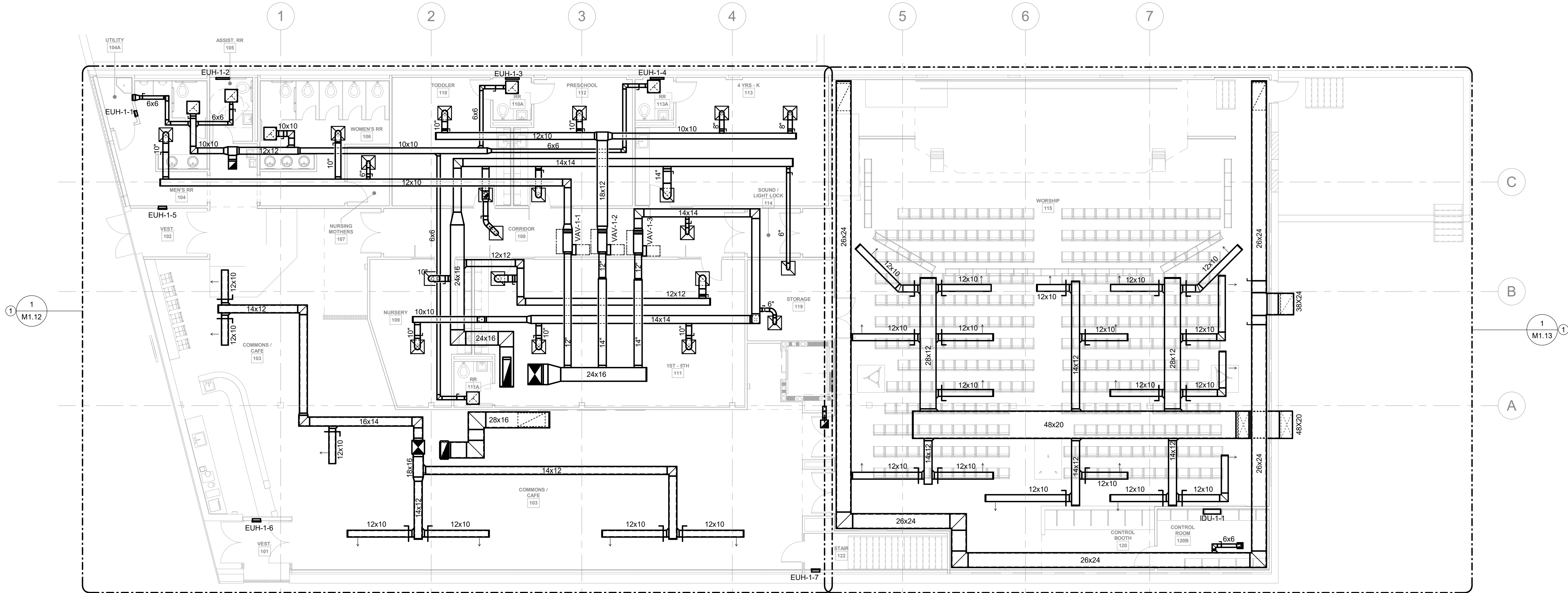
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FIRST FLOOR FULL
DUCTWORK PLAN

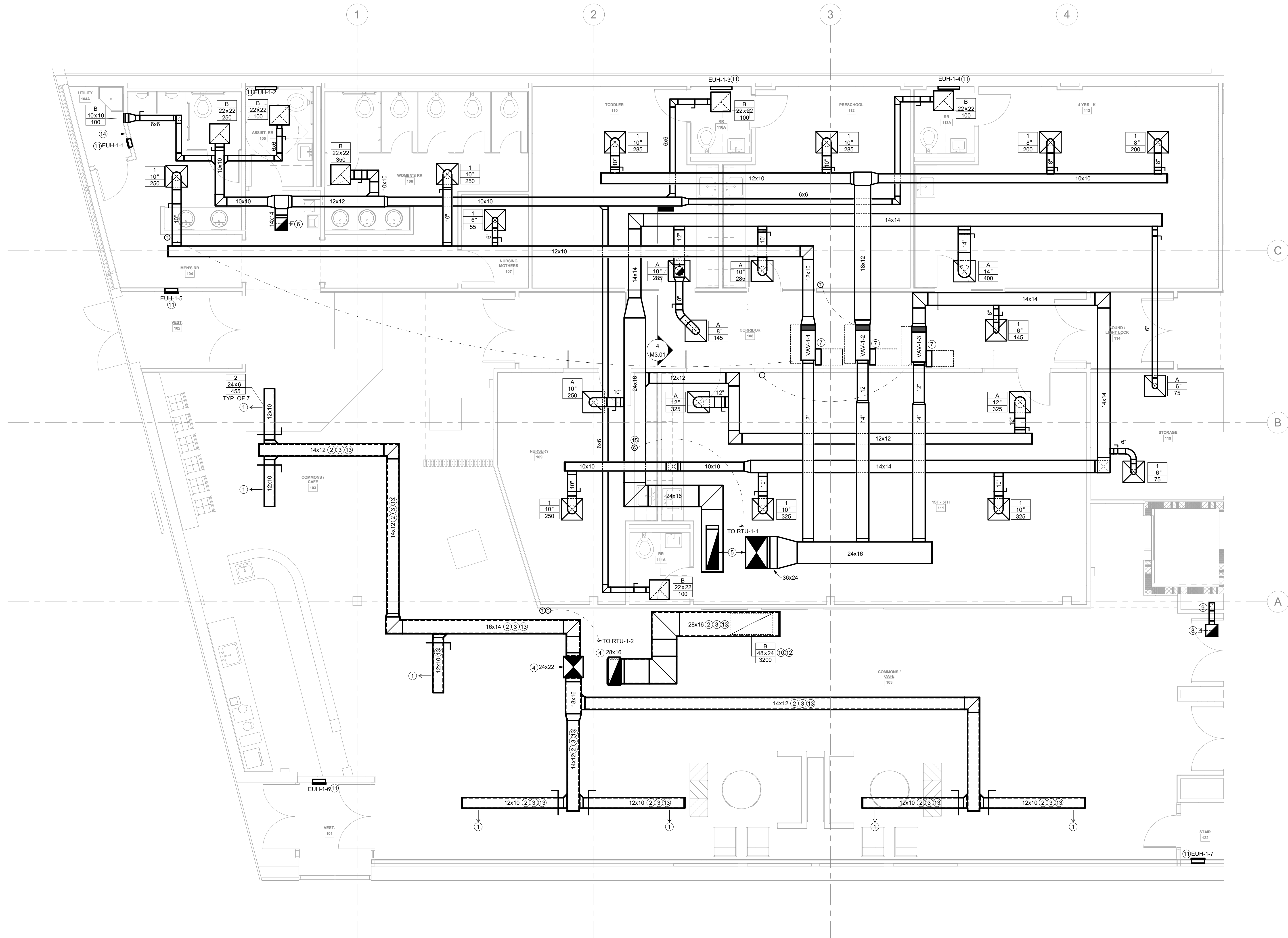
M1.11



1 FIRST FLOOR FULL DUCTWORK PLAN
1/8" = 1'-0"

M1.12 DRAWING NOTES

- SUPPLY GRILLE TO BE MOUNTED ON SIDE OF DUCT TOWARD THE WALL. THE BLADES OF THE GRILLE SHALL BE POINTED 45° TOWARDS THE FLOOR.
- DUCTWORK TO BE MOUNTED AS TIGHT AS POSSIBLE TO STRUCTURE. COORDINATE MOUNTING HEIGHT WITH ALL OTHER SERVICES.
- DUCT SYSTEM TO BE PAINTED PER THE ARCHITECTS SPECIFICATIONS. COORDINATE WITH ARCHITECT.
- SUPPLY AND RETURN CONNECTIONS UP TO RTU-1-2 ON ROOF.
- SUPPLY AND RETURN CONNECTIONS UP TO RTU-1-1 ON ROOF.
- DUCT CONNECTION UP TO EXHAUST FAN EF-1-1 ON ROOF. SEE DETAIL ON SHEET M5.01.
- VAV BOX TO BE LOCATED SUCH THAT IT IS ACCESSIBLE FROM THE CORRIDOR BELOW. INSTALL SUCH THAT ALL MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES ARE MAINTAINED.
- DUCT CONNECTION UP TO EXHAUST FAN EF-0-3 ON ROOF. SEE DETAIL ON SHEET M5.01.
- 6X6 EXHAUST DUCT DOWN TO FLOOR BELOW. SEE SHEET M1.02 FOR CONTINUATION.
- RETURN GRILLE LOCATED ON BOTTOM SIDE OF DUCTWORK.
- EUH TO BE INSTALLED WITH INTEGRAL TAMPER RESISTANT THERMOSTAT.
- MOUNT RETURN GRILLE SUCH THAT BLADES ARE ANGLED TOWARDS THE WALL.
- DUCT SYSTEM TO BE LINED WITH 1" FIBERGLASS LINING. DUCT SIZE SHOWN SHALL BE THE FREE AREA WITHIN THE LINING.
- ORION CONTROL SYSTEM MANAGER AND EF-1-1 PROGRAMMABLE TIMECLOCK CONTROLLER TO BE LOCATED ON THIS WALL. COORDINATE WITH ALL OTHER TRADES.
- DUCT MOUNTED CO2 SENSOR.



1 FIRST FLOOR PARTIAL DUCTWORK PLAN - COMMONS
1/4" = 1'-0"



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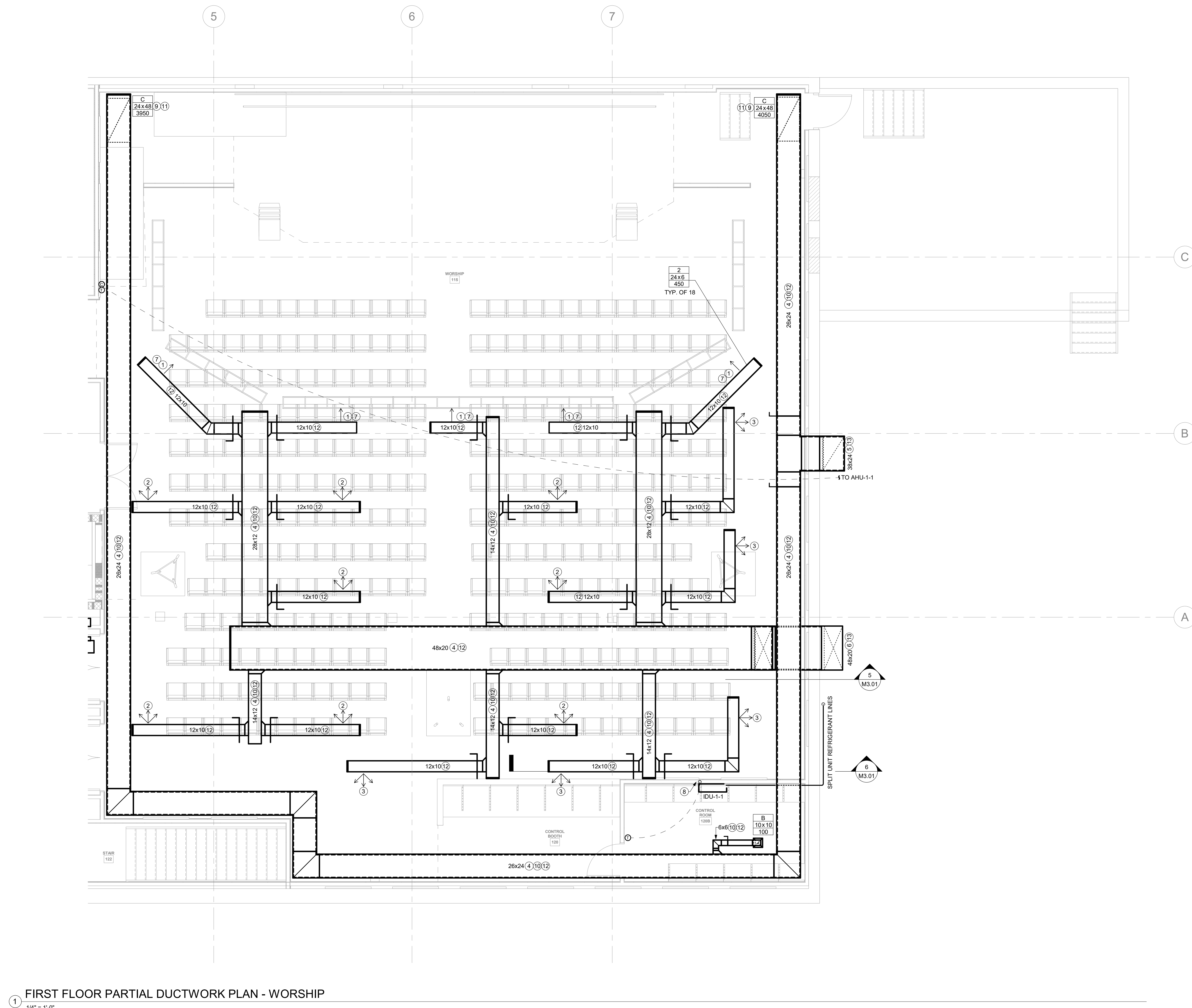
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FIRST FLOOR
PARTIAL
DUCTWORK PLAN
WORSHIP

M1.13

- 1 SUPPLY GRILLE TO BE MOUNTED ON TOP OF DUCT TOWARD THE STAGE. THE BLADES OF THE GRILLE SHALL BE POINTED 22.5° DOWN TOWARDS THE STAGE.
- 2 SUPPLY GRILLE TO BE MOUNTED ON SIDE OF DUCT FACING THE STAGE. THE BLADES OF THE GRILLE SHALL BE POINTED 45° DOWN TOWARDS THE FLOOR.
- 3 SUPPLY GRILLE TO BE MOUNTED ON TOP OF DUCT FACING THE WALL. THE BLADES OF THE GRILLE SHALL BE POINTED 45° DOWN TOWARDS THE FLOOR.
- 4 DUCTWORK TO BE MOUNTED AS TIGHT AS POSSIBLE TO STRUCTURE. COORDINATE MOUNTING HEIGHT WITH ALL OTHER SERVICES.
- 5 38X24 RETURN DUCT RUN DOWN THE OUTSIDE WALL. SEE CONTINUATION ON SHEET M1.02.
- 6 48X20 SUPPLY DUCT RUN DOWN THE OUTSIDE WALL. SEE CONTINUATION ON SHEET M1.02.
- 7 COORDINATE EXACT GRILLE LOCATION WITH LIGHTING EQUIPMENT. POSITION GRILLE SUCH THAT THERE IS A CLEAR AREA IN FRONT FOR AIR DISTRIBUTION.
- 8 IDU-11 CONDENSATE LINE RUN DOWN THE STUD WALL INTO THE JOIST CAVITY IN THE FLOOR BELOW. SEE CONTINUATION ON SHEET M2.02.
- 9 RETURN GRILLE LOCATED ON BOTTOM SIDE OF DUCTWORK.
- 10 DUCT SYSTEM TO BE PAINTED PER THE ARCHITECT'S SPECIFICATIONS. COORDINATE WITH ARCHITECT.
- 11 MOUNT RETURN GRILLE SUCH THAT THE BLADES ARE ANGLED AWAY FROM THE CONGREGATION.
- 12 DUCT SYSTEM TO BE LINED WITH 1" FIBERGLASS LINING. DUCT SIZE SHOWN SHALL BE THE FREE AREA WITHIN THE 10' BE EXTERIOR DOUBLE WALL DUCTWORK PER SPECIFICATIONS.

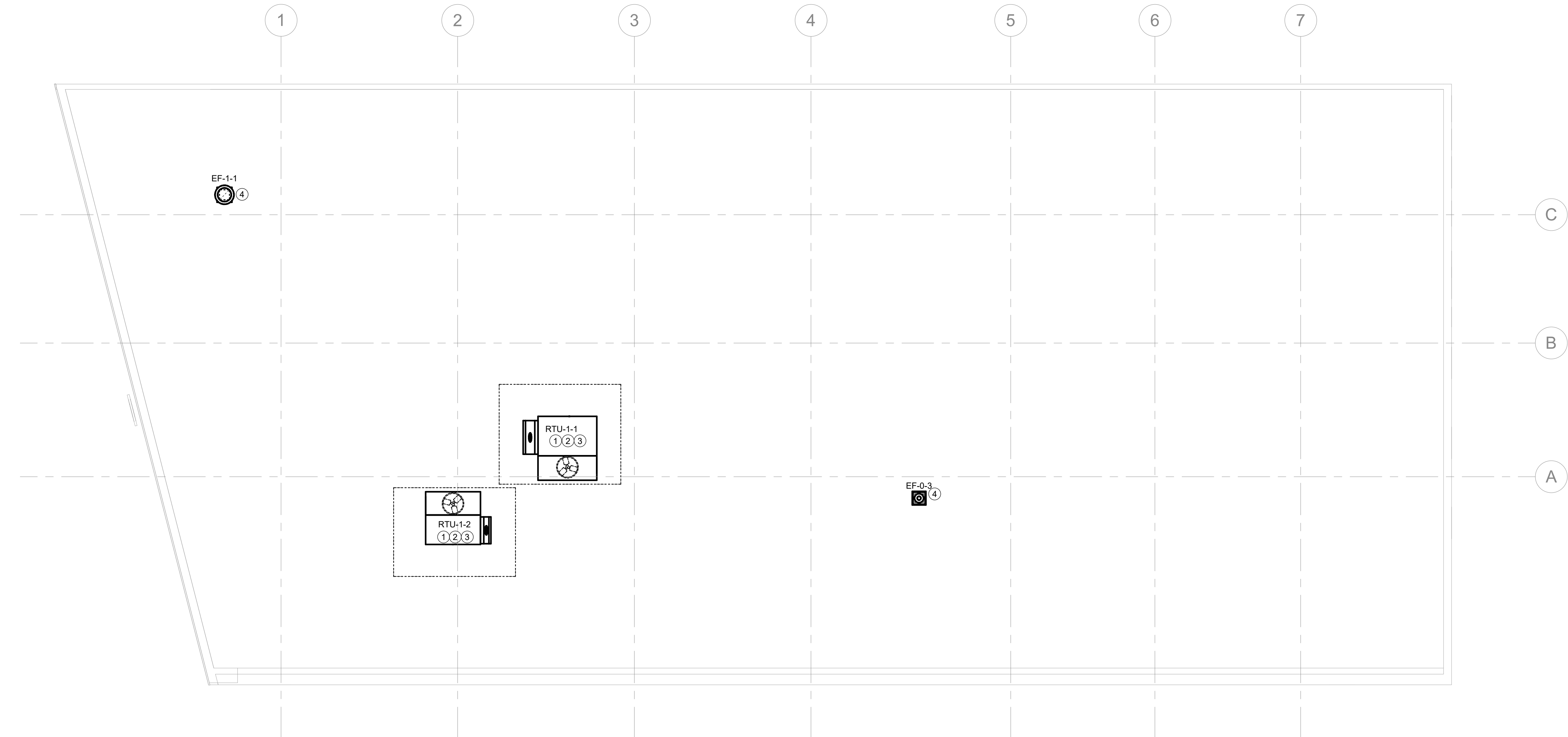




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03.03.21

M1.21 DRAWING NOTES

- 1 RTU TO BE PLACED ON ROOF CURB. COORDINATE FINAL ROOF PENETRATIONS IN THE FIELD.
- 2 INSTALLING CONTRACTOR TO PROVIDE CONDENSATE TRAP WITH FREE DISCHARGE ONTO THE ROOF. SEE DETAIL.
- 3 FINAL UNIT LOCATION TO BE CONFIRMED BY STRUCTURAL ENGINEER.
- 4 FAN TO BE PLACED ON ROOF CURB. COORDINATE FINAL ROOF PENETRATIONS IN THE FIELD.



1 ROOF DUCTWORK PLAN
1/8" = 1'-0"

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ROOF DUCTWORK
PLAN

M1.21



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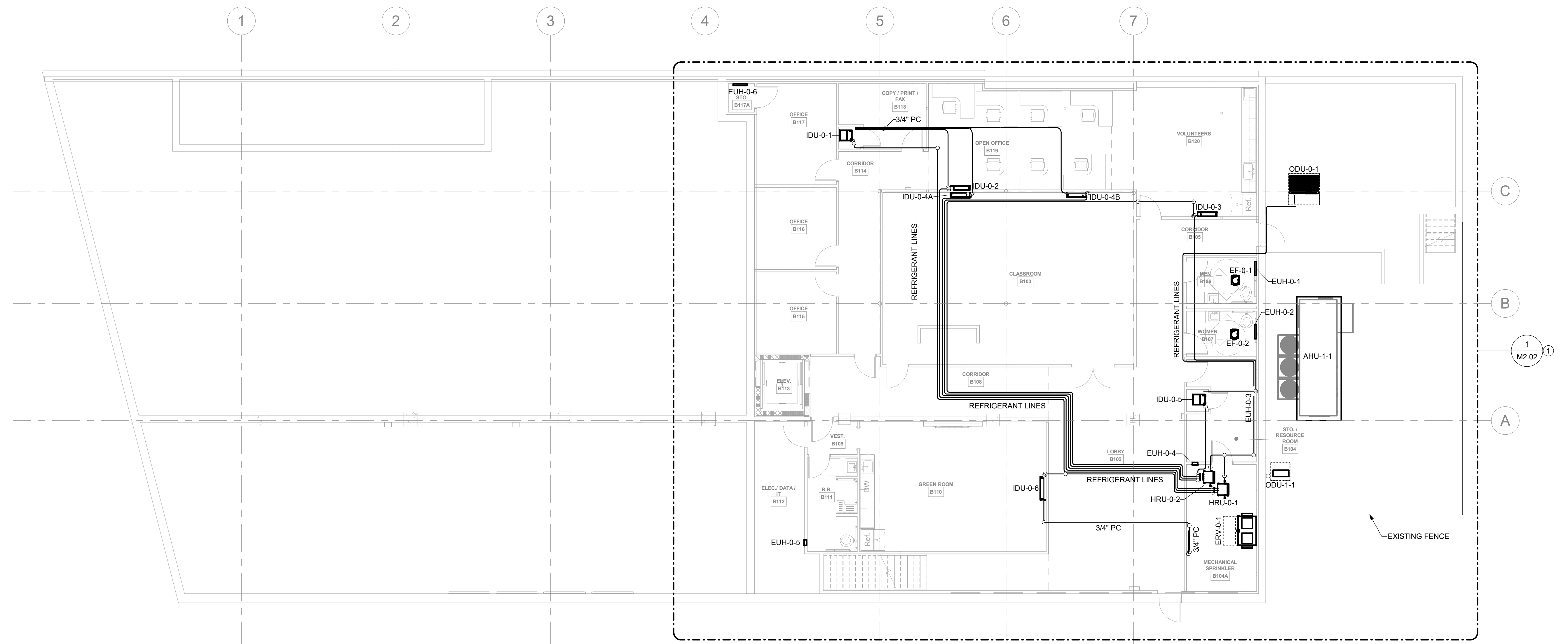
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BASEMENT FLOOR
FULL PIPING PLAN

M2.01



1 BASEMENT FLOOR FULL PIPING PLAN
1/8" = 1'-0"



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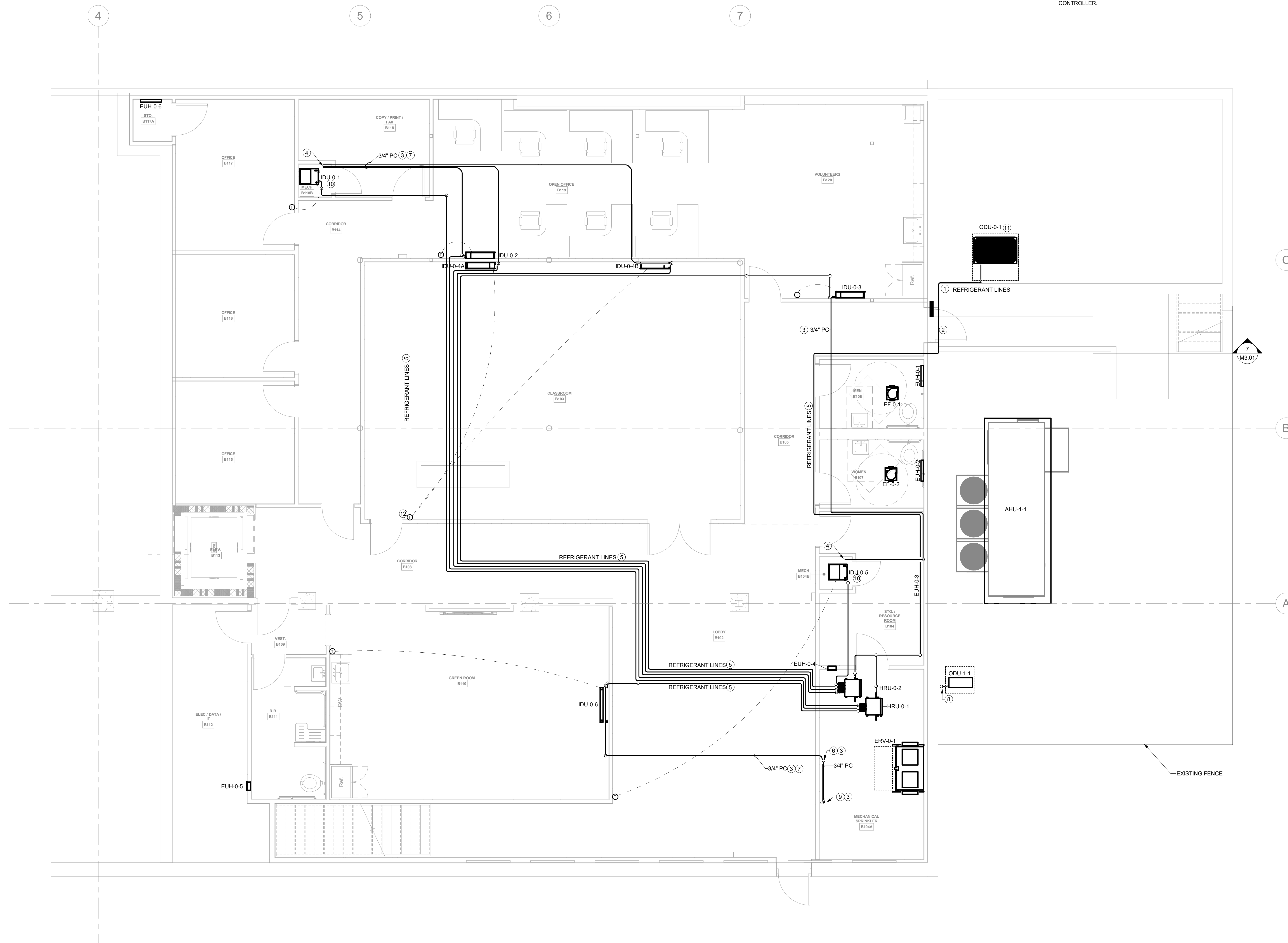
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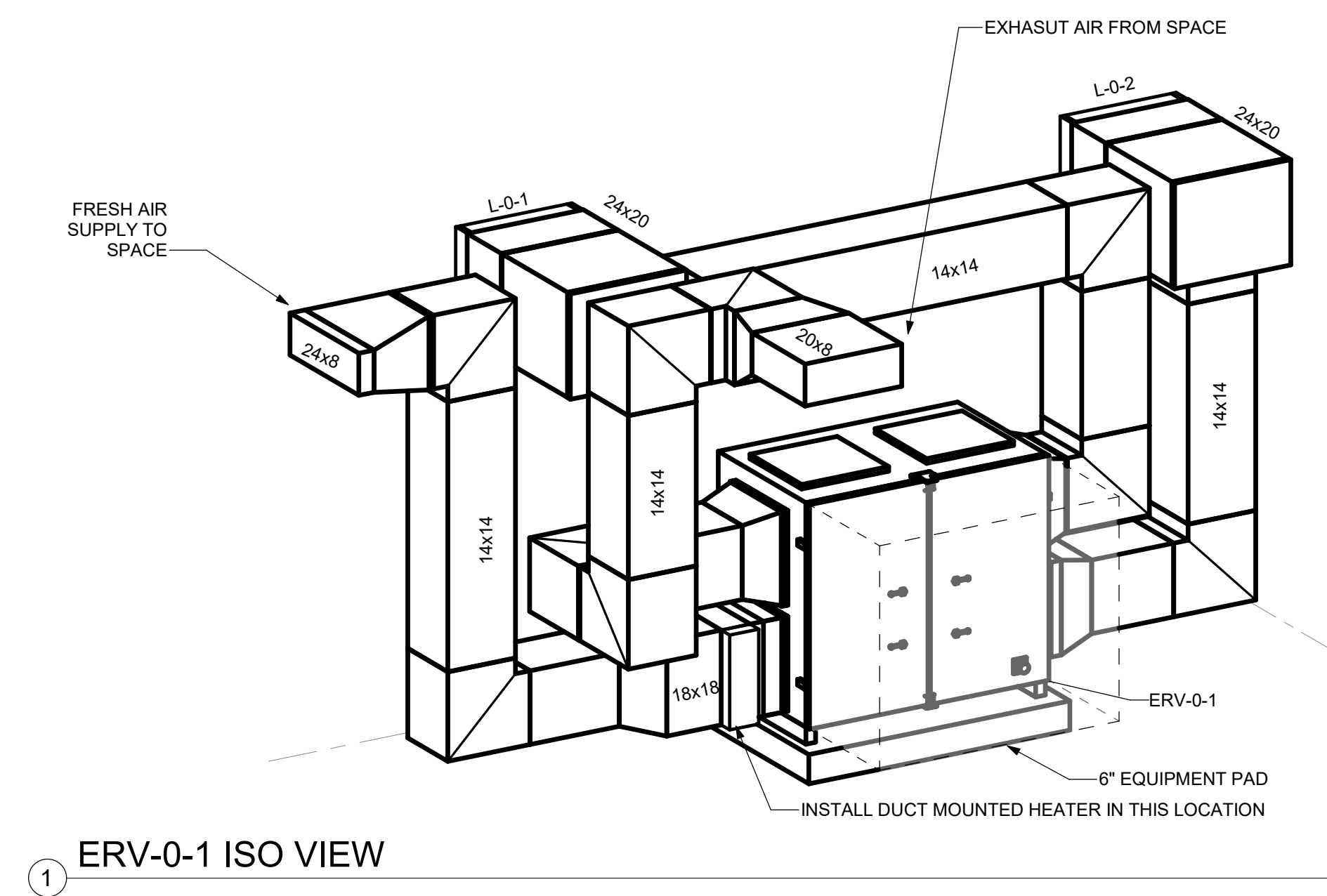
BASEMENT FLOOR
PARTIAL PIPING
PLAN

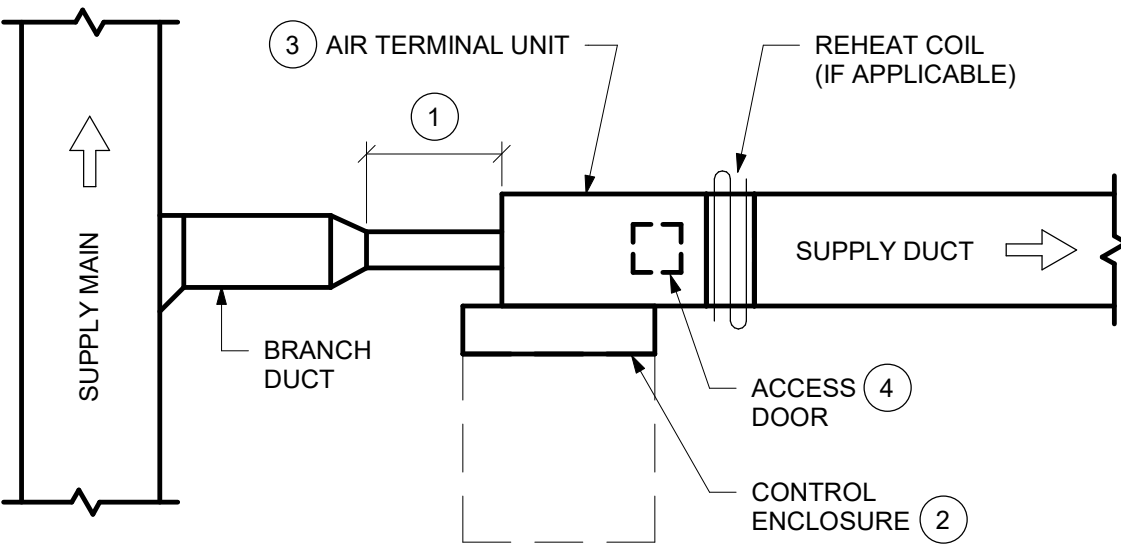
M2.02

- 1 REFRIGERANT LINES RUN ALONG LOADING DOCK REAILING AND ROUTED ABOVE ENTRANCE DOOR.
- 2 REFRIGERANT LINES RUN ABOVE THE DOOR LEVEL.
- 3 COORDINATE FINAL ROUTING OF PUMPED CONDENSATE LINES WITH ALL OTHER TRADES AND EXISTING FIELD CONDITIONS. USE TWO 45° ELBOWS AT CHANGES IN DIRECTION. IF A 90° ELBOW IS REQUIRED, PROVIDE ACCESSIBLE CLEANOUT. COORDINATE MATERIAL WITH PLUMBING SPECIFICATIONS.
- 4 PUMPED CONDENSATE LINES ROUTED TO FLOOR DRAIN WITHIN THE MECHANICAL CLOSET. COORDINATE WITH PC.
- 5 SINGLE LINE SHOWN FOR CLARITY AND TO INDICATE ROUTING. LINES SHOWN REPRESENT MULTIPLE RUNS OF REFRIGERANT. SEE ADDITIONAL INFORMATION IN SECTION 21-00 DOWN ON SHEET M3.01 FOR FINAL SCHEDULING OF REFRIGERANT TRADES AND EXISTING FIELD CONDITIONS. IF REFRIGERANT LINES ARE RUN UP JOINT CAVITIES, ENSURE THAT THERE ARE NO LOW PIPING TRAPS CREATED WITHIN THE RUNS.
- 6 PUMPED CONDENSATE LINE ROUTED FROM IDU-1 ON THE FIRST FLOOR.
- 7 PUMPED CONDENSATE LINE RUN UP JOINT JOINT CAVITY.
- 8 REFRIGERANT LINES RUN UP OUTSIDE WALL TO FLOOR ABOVE. SEE CONTINUATION ON SHEET M3.13.
- 9 PUMPED CONDENSATE LINES ROUTED TO FLOOR DRAIN WITHIN THE MECHANICAL SPRINKLER ROOM. COORDINATE WITH PC.
- 10 ROUTE CONDENSATE LINES TO MECHANICAL ROOM WITHIN CLOSET.
- 11 UNIT LOCATED WITHIN LOADING DOCK. UNIT TO BE MOUNTED ON GALVANIZED STEEL STAND TO SUPPORT THE UNIT A MINIMUM OF 18" ABOVE THE LOADING DOCK. SEE SECTION 21-00 ON SHEET M3.01.
- 12 PROVIDE A GROUP CONTROL KIT TO CONTROL BOTH UNITS VIA A SINGLE REMOTE CONTROLLER.



1 BASEMENT FLOOR PARTIAL PIPING PLAN
1/4" = 1'-0"



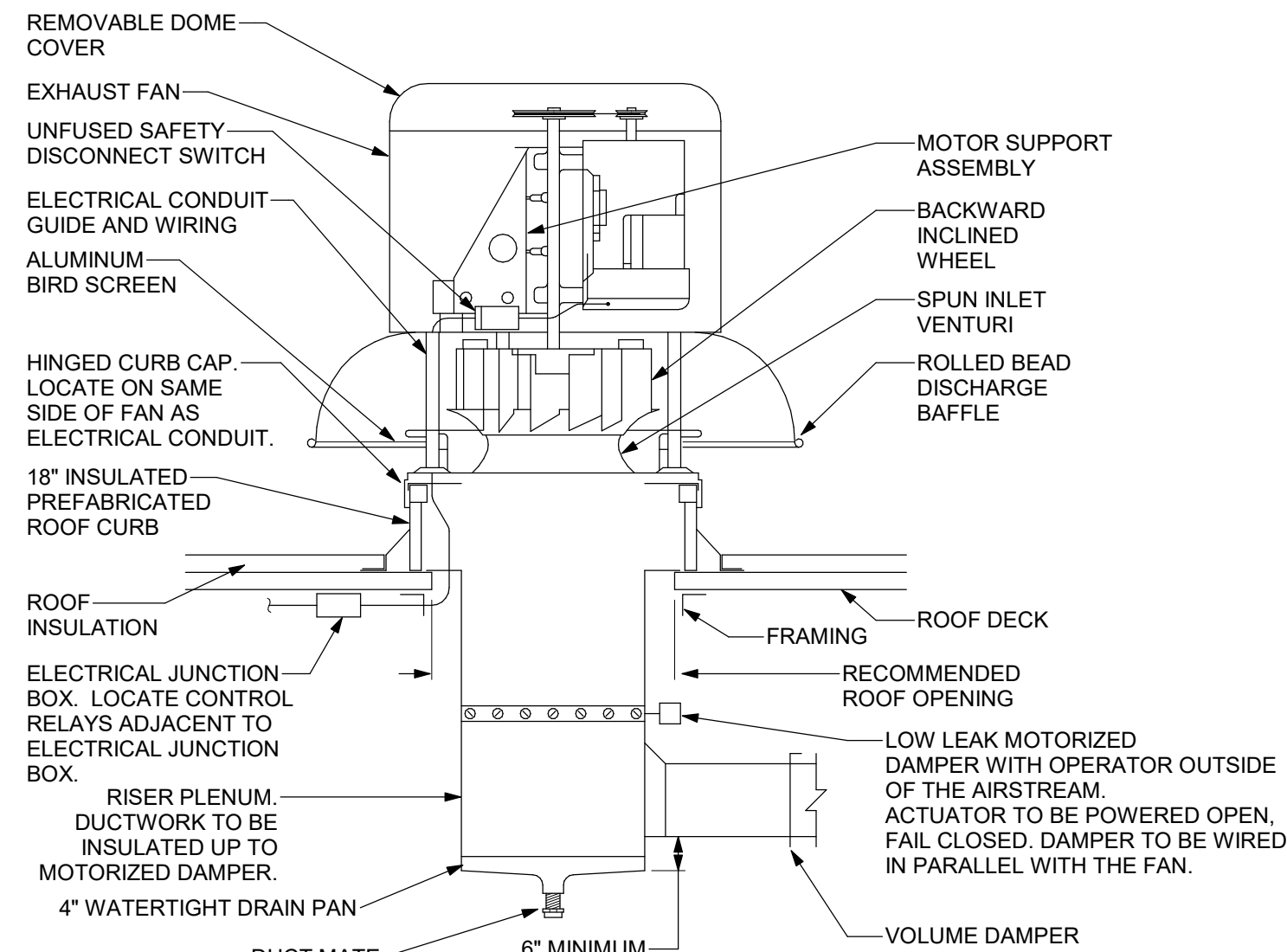


KEYED NOTES:

- 1 RIGID STRAIGHT DUCTWORK UPSTREAM OF THE TERMINAL UNIT SHALL BE A MINIMUM OF 3 TIMES THE DIAMETER OF INLET. NOT TO EXCEED 5'-0" TOTAL IN LENGTH.
- 2 MAINTAIN MINIMUM 1'-6" SERVICE CLEARANCE IN FRONT OF ENCLOSURE TO ALLOW FOR SERVICE/ACCESS.
- 3 COMPONENT ARRANGEMENT MAY VARY BY MANUFACTURER. PROVIDE INSULATION VAPOR BARRIER AS SPECIFIED.
- 4 ACCESS DOOR TO BE LOCATED AT THE BOTTOM OF THE UNIT. CONTRACTOR TO COORDINATE COIL AND CONTROL ENCLOSURE HANDING. ROTATING UNIT IN FIELD SUCH THAT ACCESS DOOR IS ON TOP OF UNIT IS NOT ACCEPTABLE.

7 VAV BOX DETAIL

NOT TO SCALE

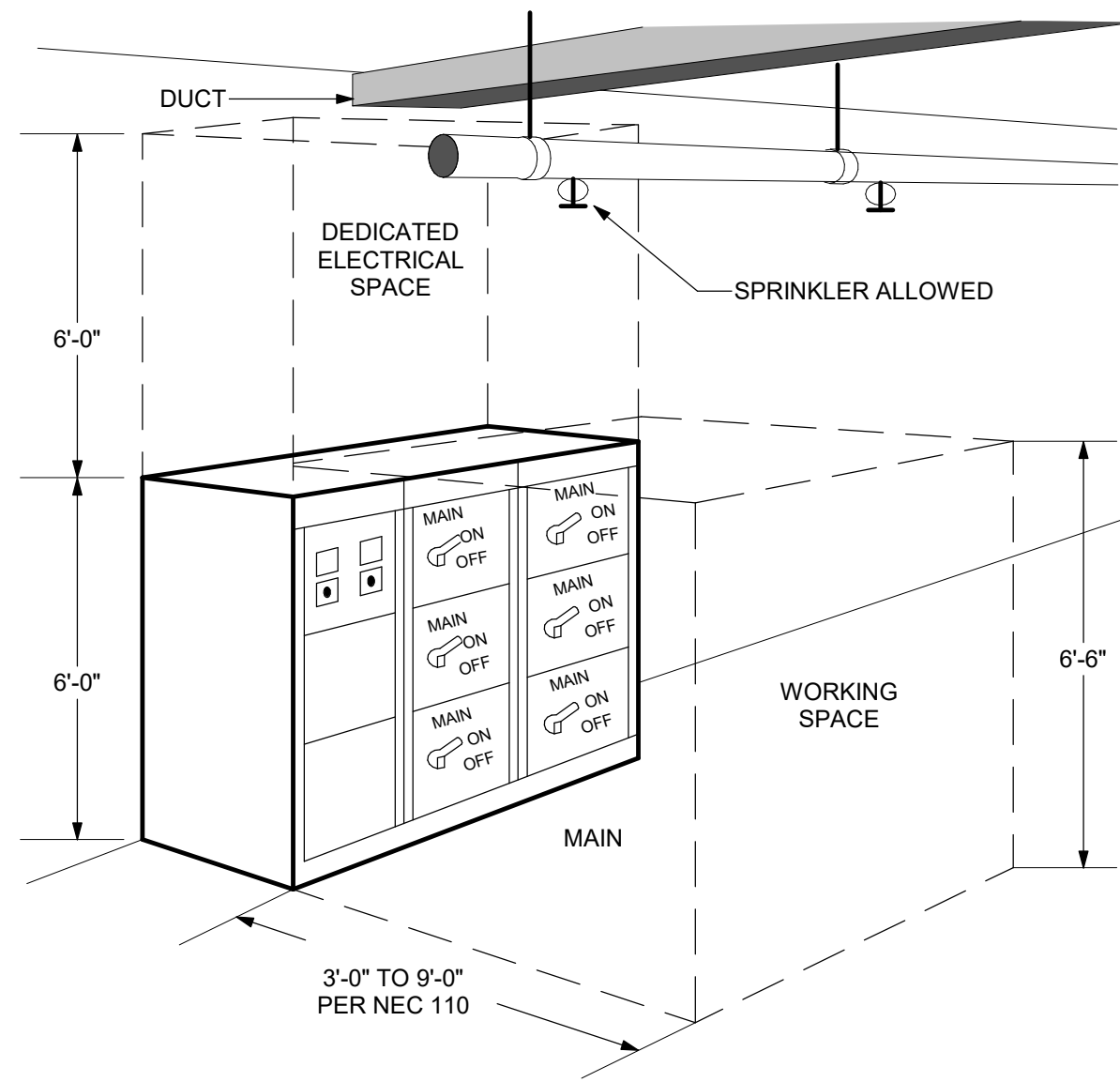


DETAIL NOTES:

- A BELT DRIVEN FAN SHOWN, DIRECT DRIVE SIMILAR.
- B REFER TO ROOF CURB DETAIL.
- C PROVIDE WIND RESTRAINT PER SPECIFICATION SECTION 230550-WIND RESTRAINT FOR HVAC SYSTEMS.

6 DOWNBLAST EXHAUST FAN DETAIL

NOT TO SCALE

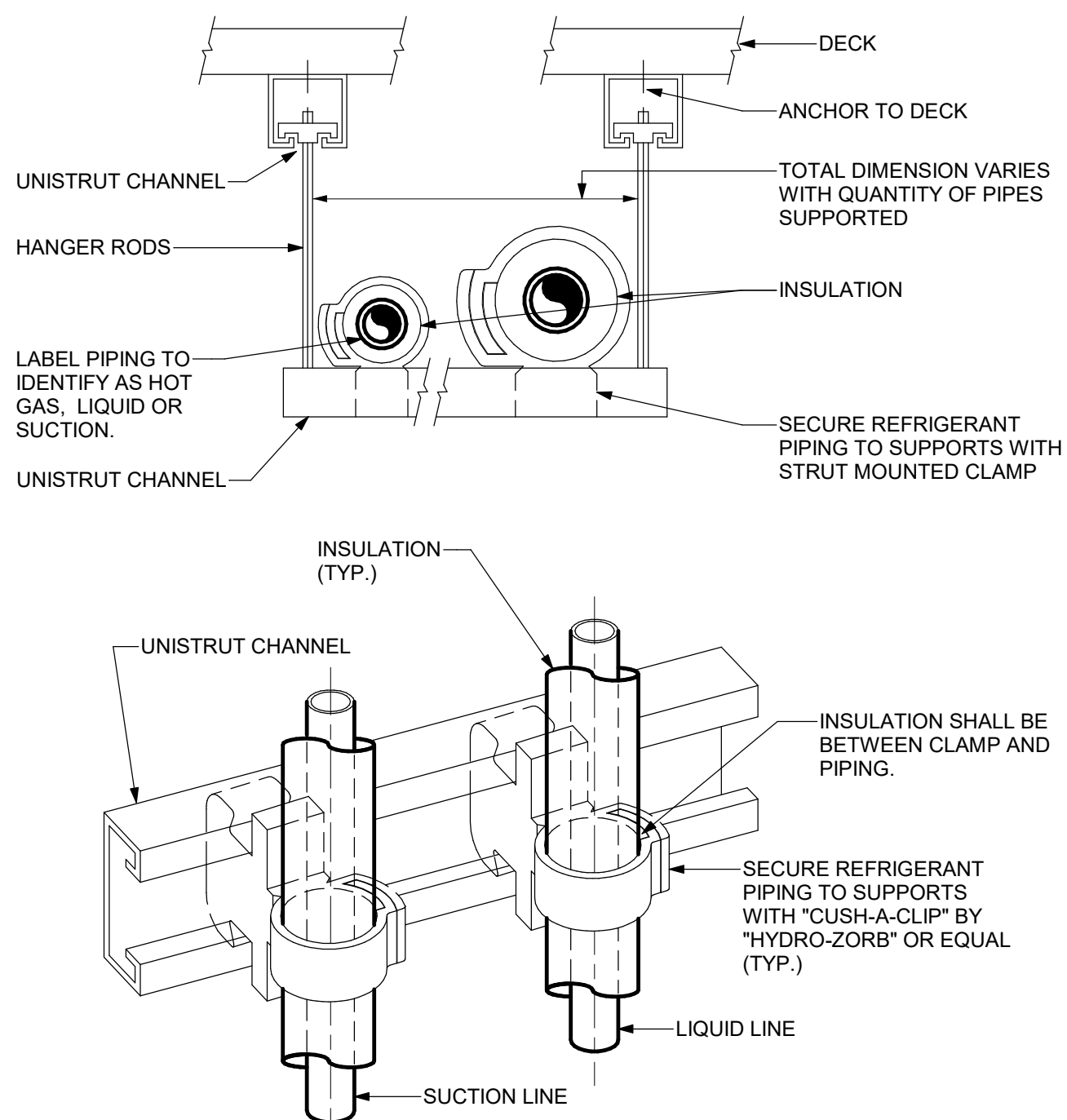


DETAIL NOTES:

- A ELECTRICAL EQUIPMENT INCLUDES PANELS, TRANSFORMERS, DISCONNECTS, STARTERS, MOTOR CONTROL CENTERS, SWITCHGEAR, ADJUSTABLE SPEED DRIVES, AND FUSED SWITCHES (THIS ALSO APPLIES TO ELECTRICAL GEAR MOUNTED DIRECTLY ON MECHANICAL EQUIPMENT).
- B DEDICATED ELECTRICAL SPACE IS DEFINED BY NEC 110.
- C NO PIPING OR DUCTWORK MAY BE INSTALLED IN DEDICATED ELECTRICAL SPACE OR WORKING SPACE.

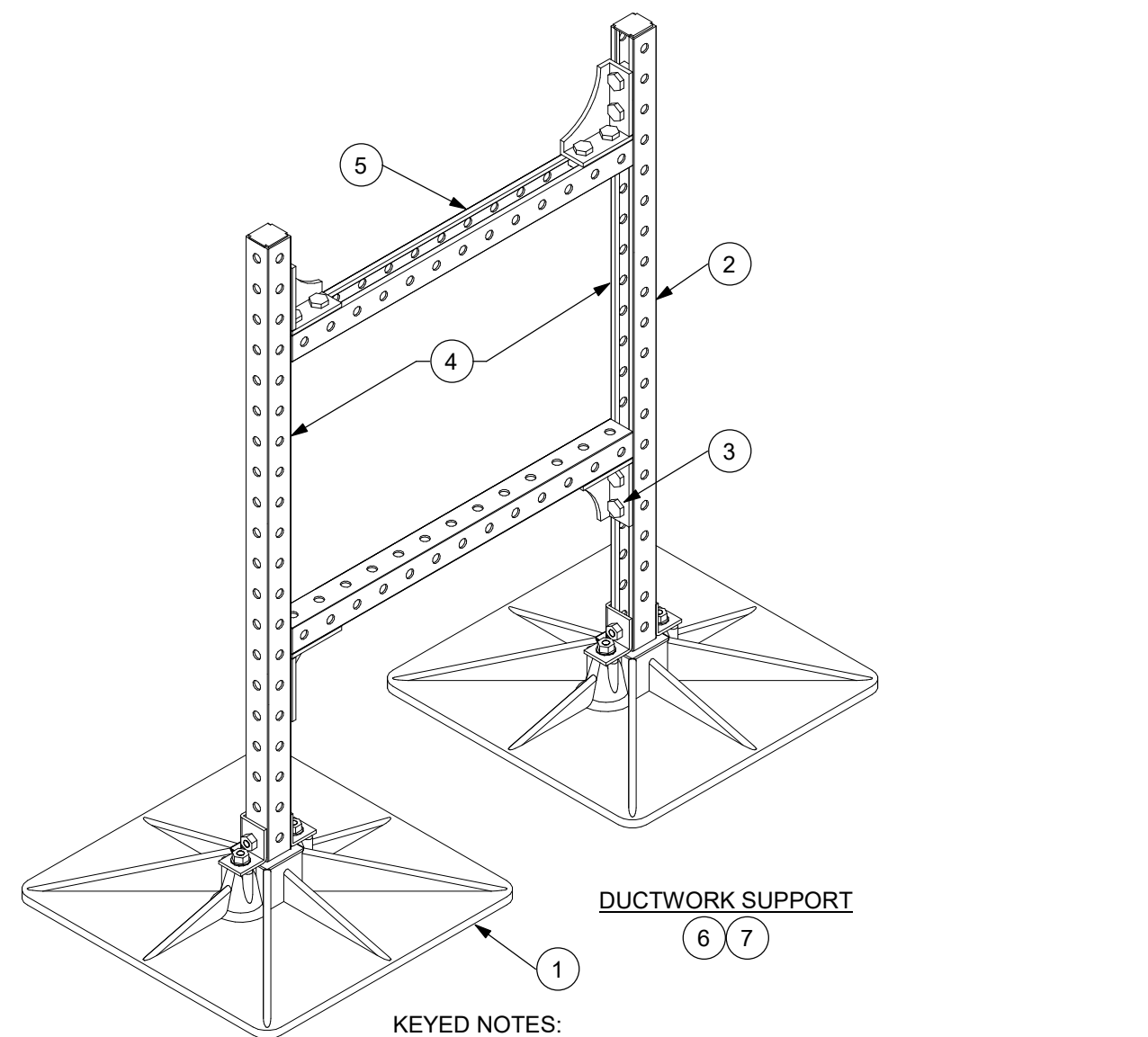
5 PIPING AND DUCTWORK OVER ELECTRICAL EQUIPMENT DETAIL

NOT TO SCALE



4 REFRIGERANT PIPE SUPPORT DETAIL

NOT TO SCALE



KEYED NOTES:

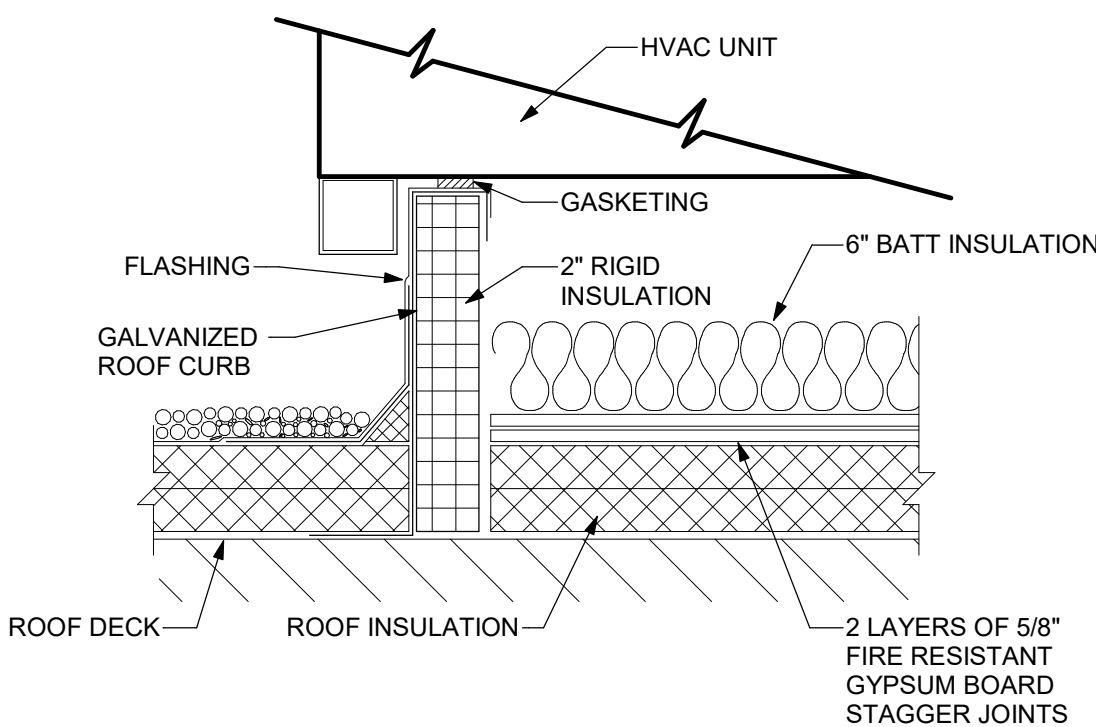
- 1 18" x 18" HDPE BASE.
- 2 HOT DIPPED GALVANIZED (HDG) CARBON STEEL FRAME 1-7/8".
- 3 HDG FASTENERS.
- 4 PROVIDE HORIZONTAL BRACING TO LEGS OF DUCT SUPPORTS AS RECOMMENDED BY MANUFACTURER.
- 5 UPLIFT SUPPORT.
- 6 SUPPORTS SHALL BE SPACED NO MORE THAN 8'-0" APART.
- 7 SUPPORTS SHALL BE AS MANUFACTURED BY PORTABLE PIPE HANGERS AND DESIGNED FOR SNOW LOADING PER NYS BUILDING CODE REQUIREMENTS.

DETAIL NOTES:

- A PROVIDE WIND RESTRAINT PER SPECIFICATION SECTION 230550-WIND RESTRAINT FOR HVAC SYSTEMS.

3 EXTERIOR DUCT SUPPORT DETAIL

NOT TO SCALE

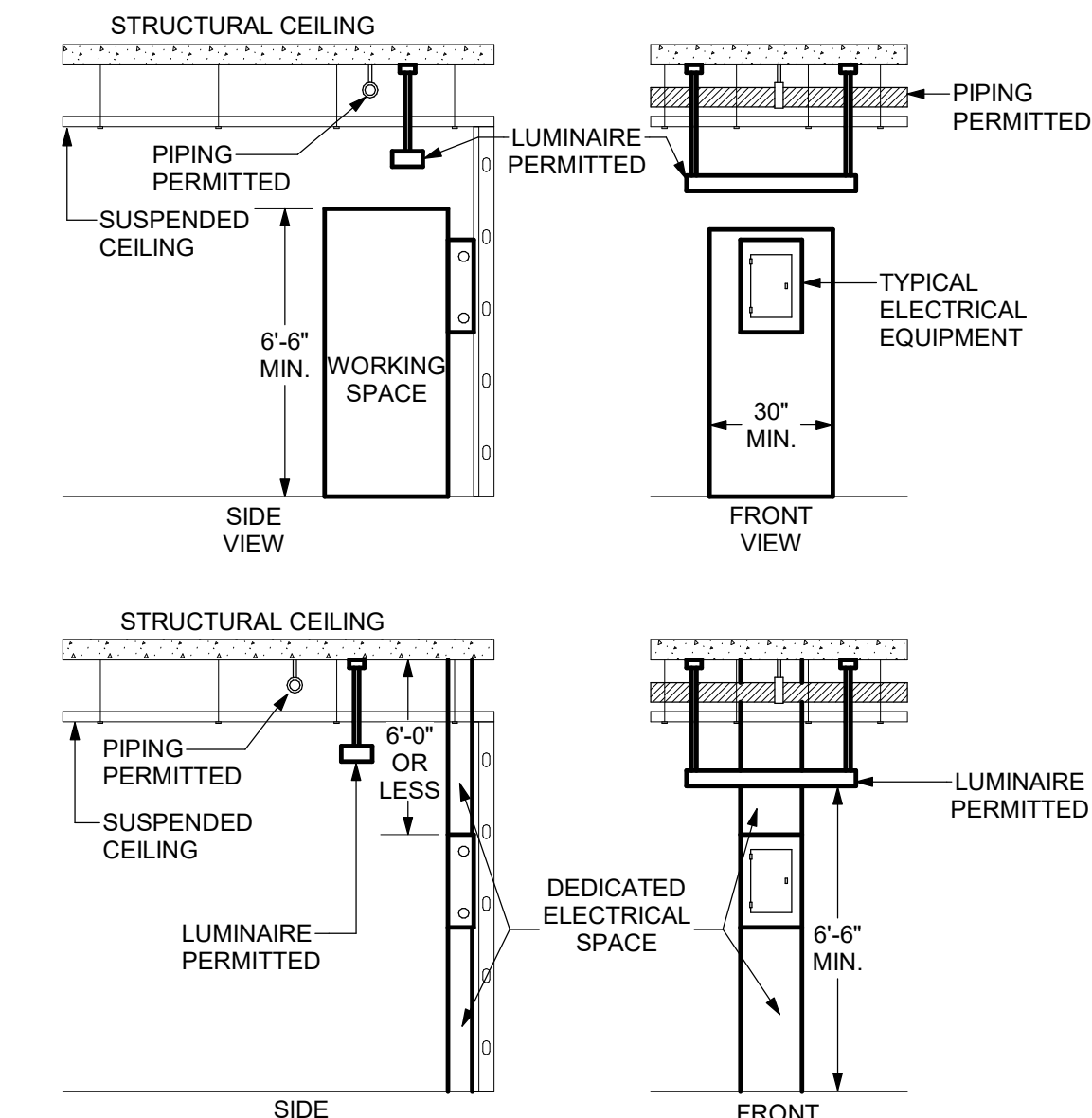


DETAIL NOTES:

- A G.C. TO PROVIDE ROOF OPENING, FRAMING AND FLASHING.
- B M.C. TO LOCATE, SET AND SECURE CURB.
- C PROVIDE SHIMS WHERE REQUIRED TO LEVEL CURB.
- D PROVIDE BLOCKING BENEATH CURB IN FLUTES OF METAL DECKS.
- E PROVIDE WIND RESTRAINT PER SPECIFICATION SECTION 230550-WIND RESTRAINT FOR HVAC SYSTEMS

2 ROOFTOP EQUIPMENT ROOF CURB DETAIL

NOT TO SCALE

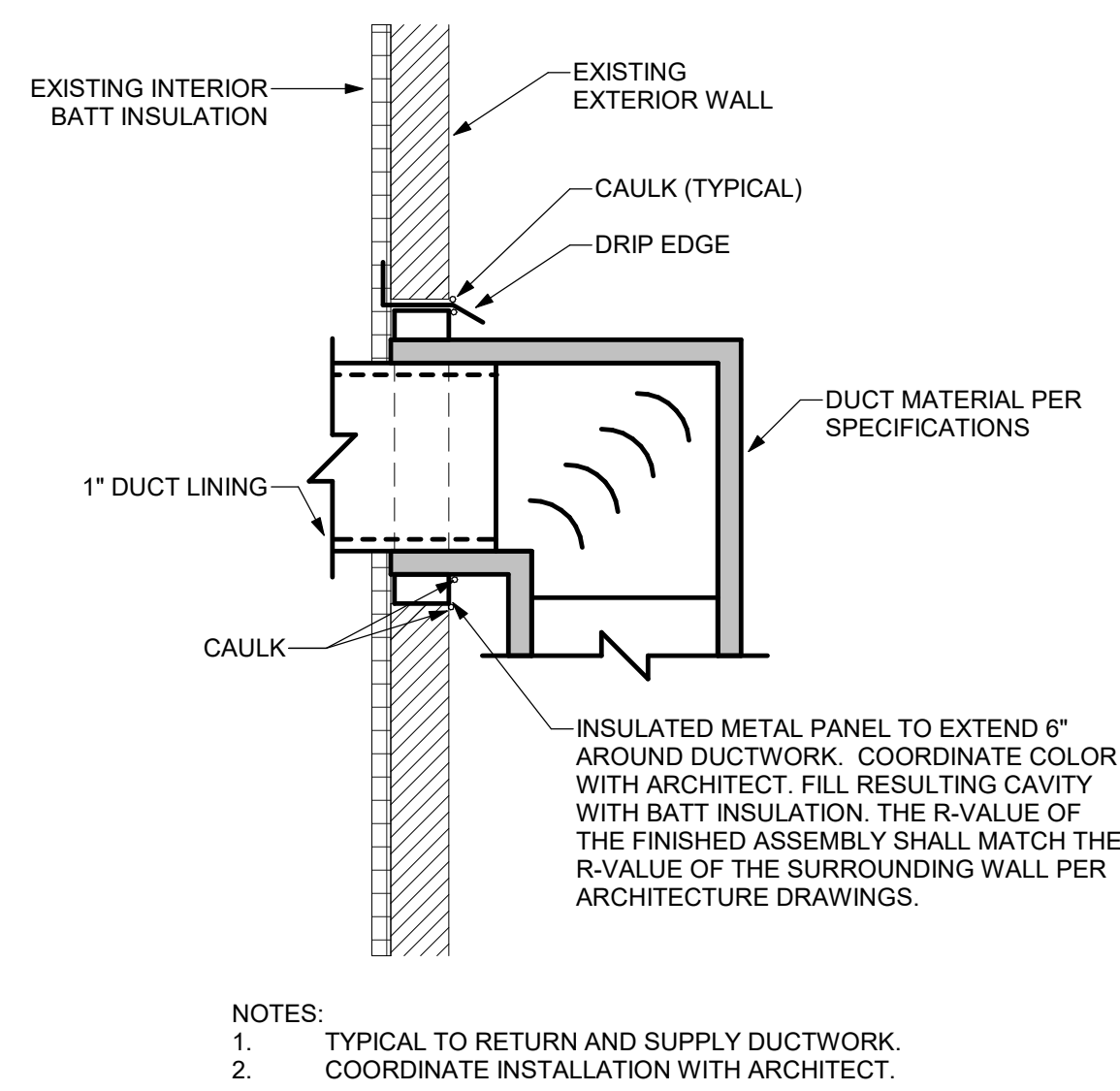


DETAIL NOTES:

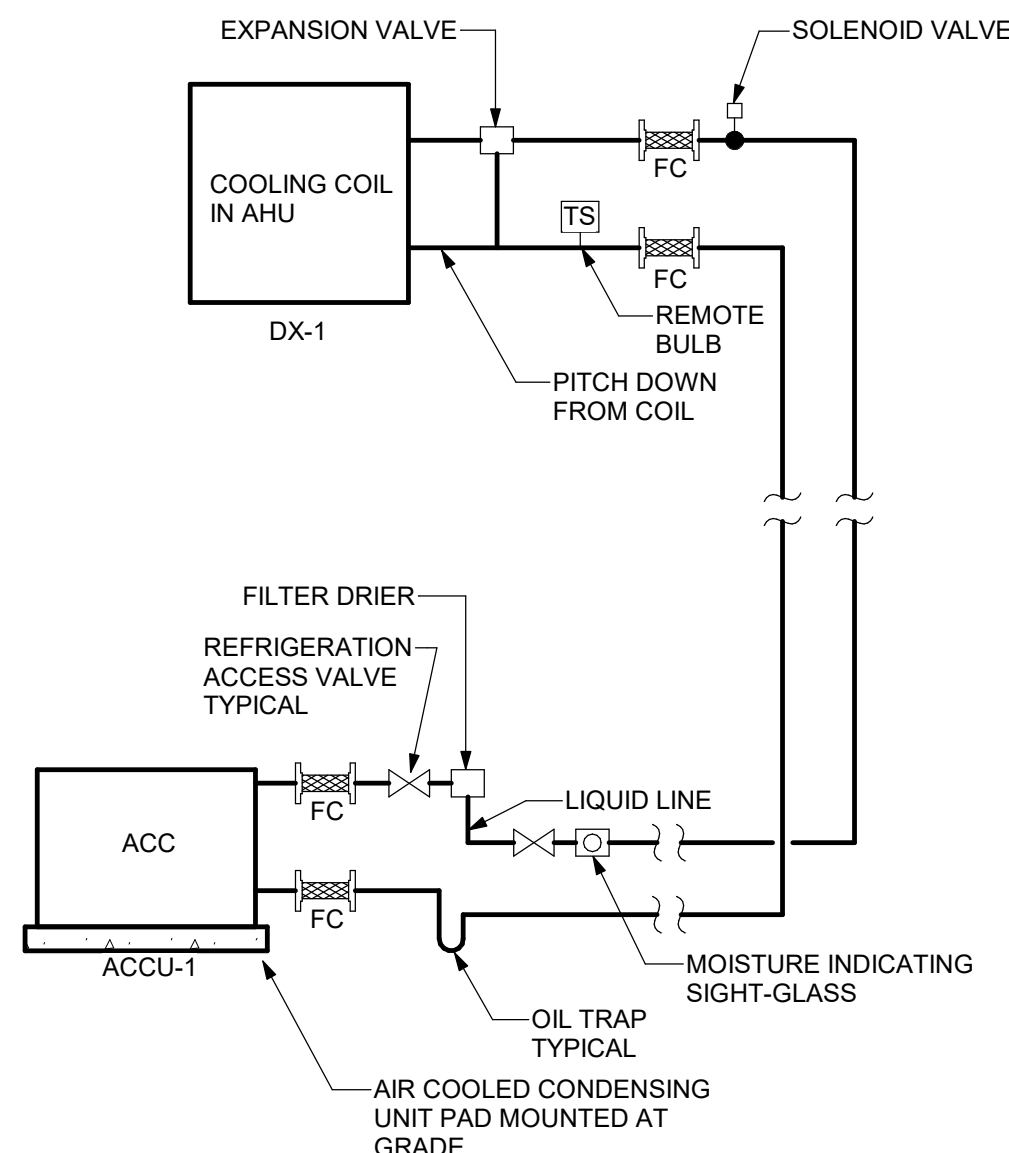
- 1 ANCHOR BOLT, SIZE & LOCATION AS REQUIRED TO MATCH EQUIPMENT BASE.
- 2 PLASTIC SLEEVE & ANCHOR.
- 3 #3 REINFORCING BARS, 12" O.C. EACH WAY.
- 4 #4 DOWEL, 12" O.C.
- 5 CHAMFER.
- 6 CONCRETE PAD 3,000 PSI CONCRETE, LENGTH & WIDTH, 6" GREATER THAN THE EQUIPMENT BASE PLATE.

1 CONCRETE EQUIPMENT BASE DETAIL

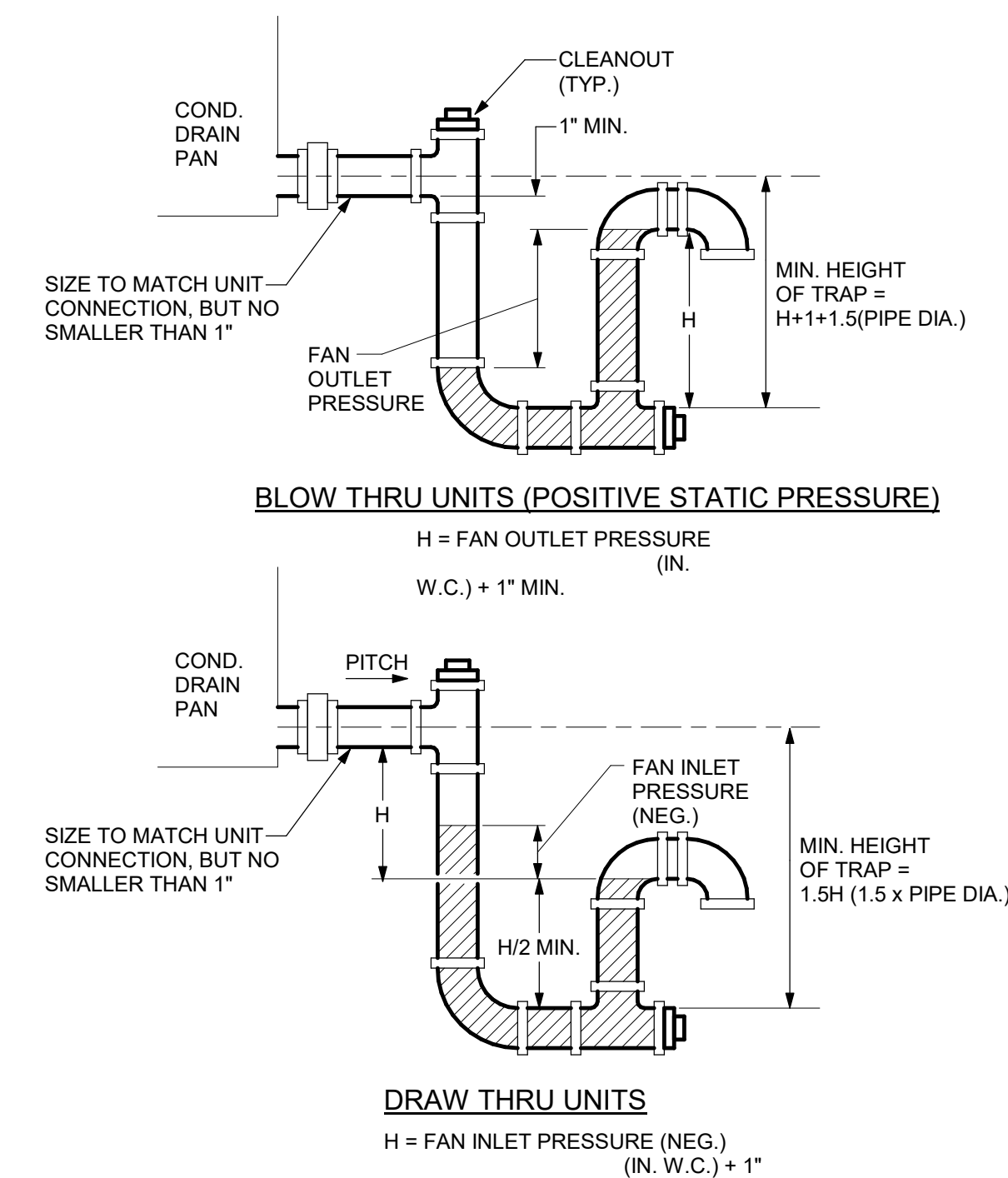
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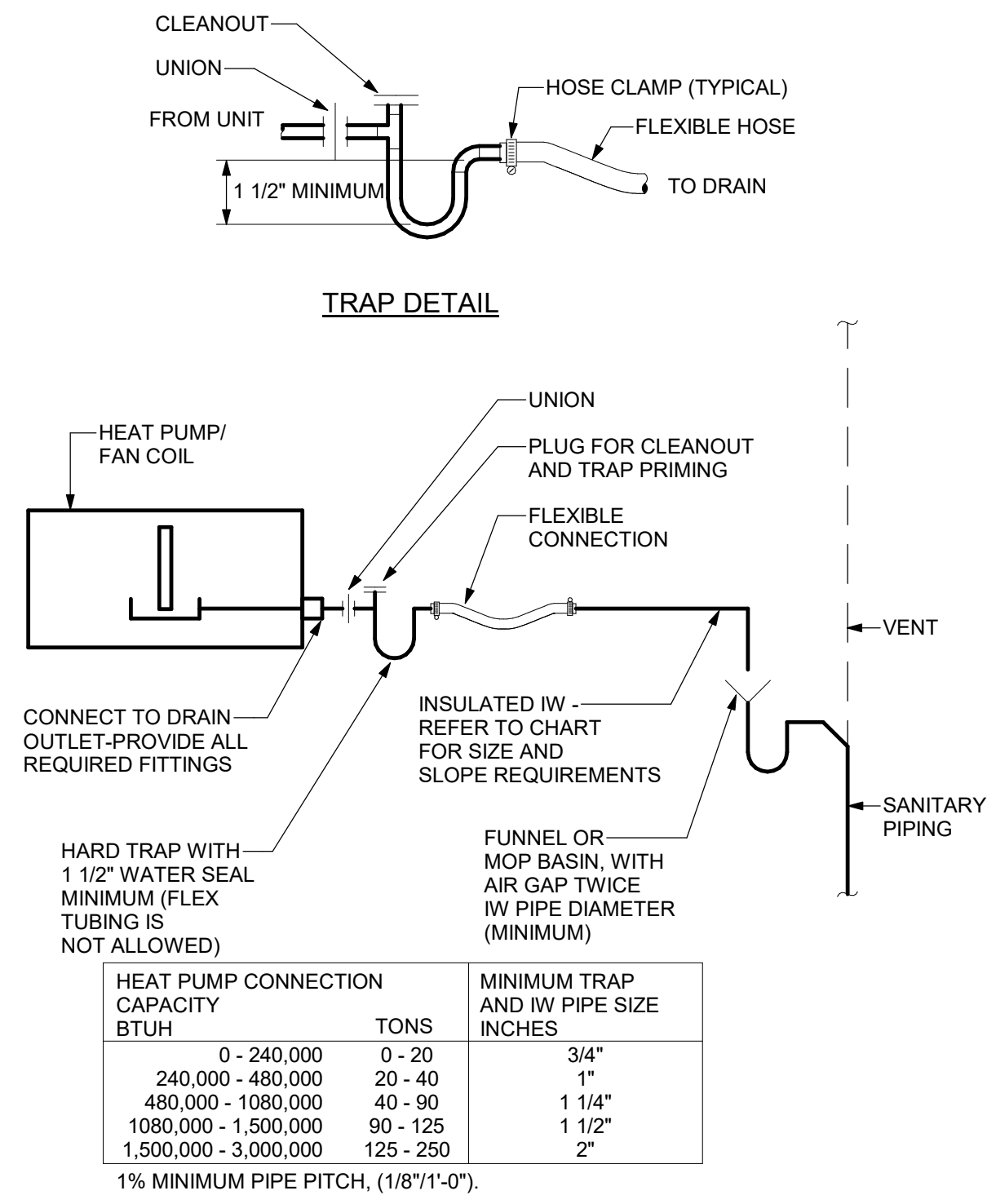
8 DUCT EXTERIOR WALL PENETRATION DETAIL
NOT TO SCALE



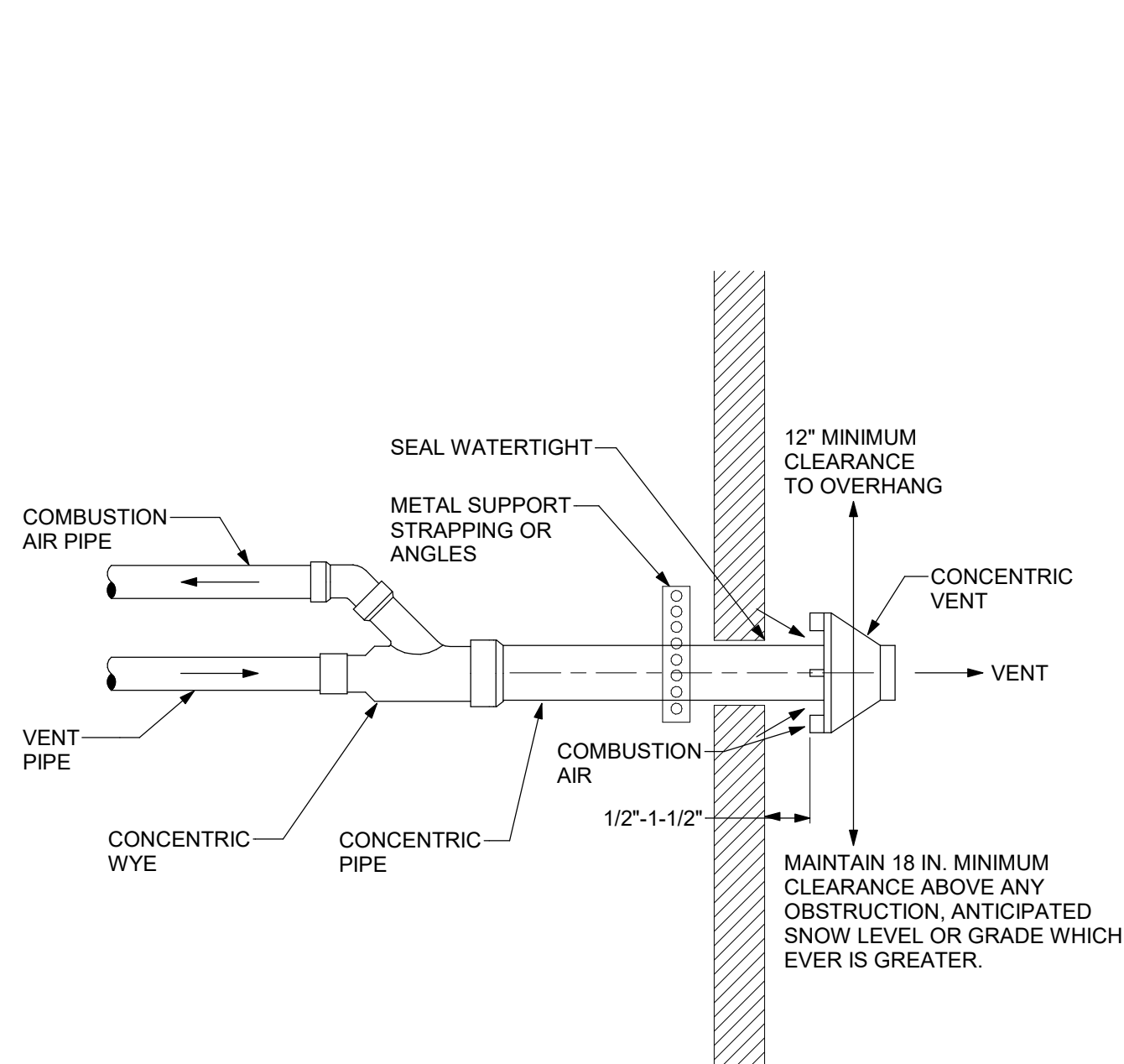
7 DX PIPING CONNECTIONS DETAIL - CONDENSING UNIT BELOW COIL
NOT TO SCALE



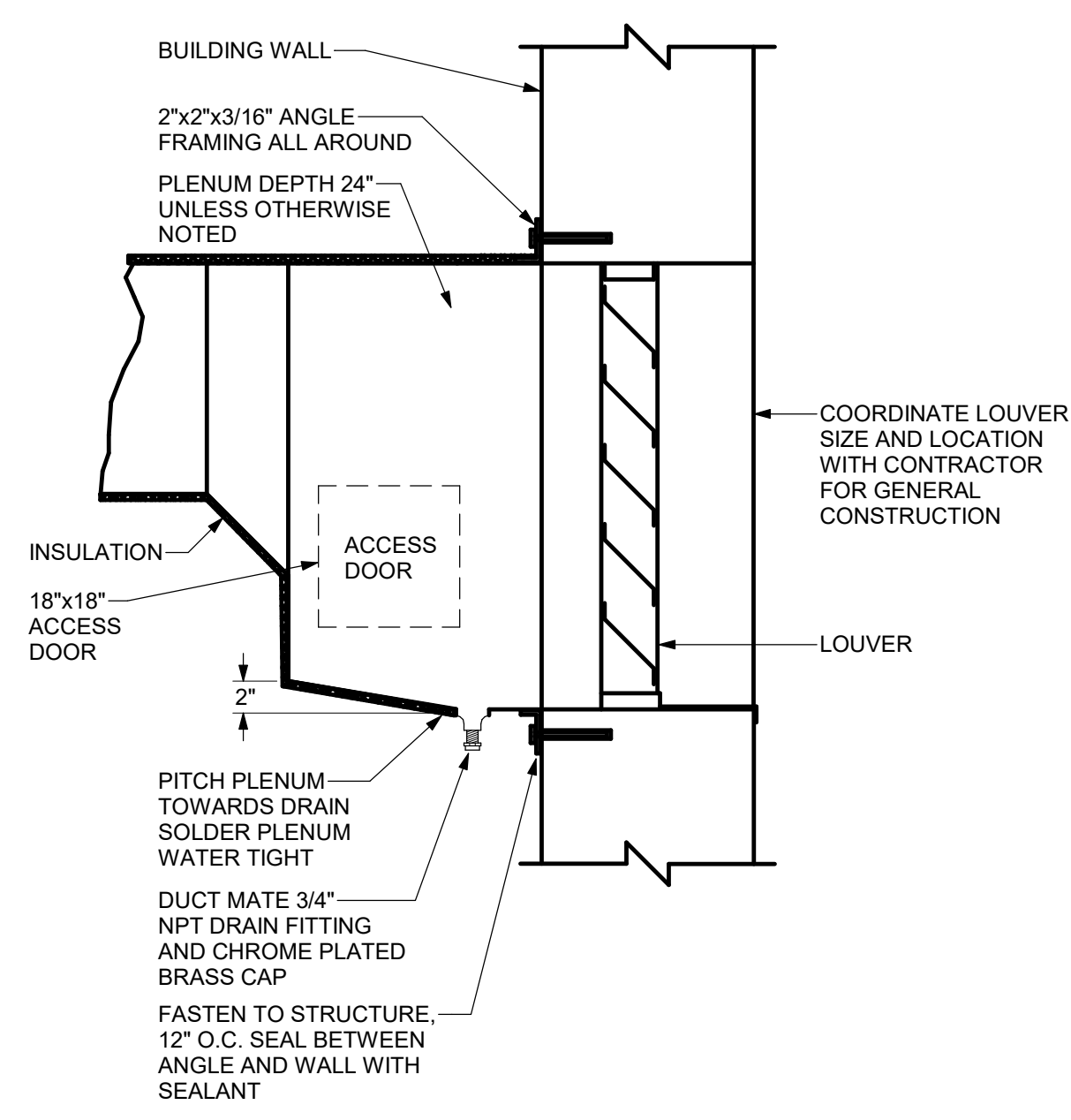
6 ROOFTOP UNIT CONDENSATE DRAIN TRAP DETAIL
NOT TO SCALE



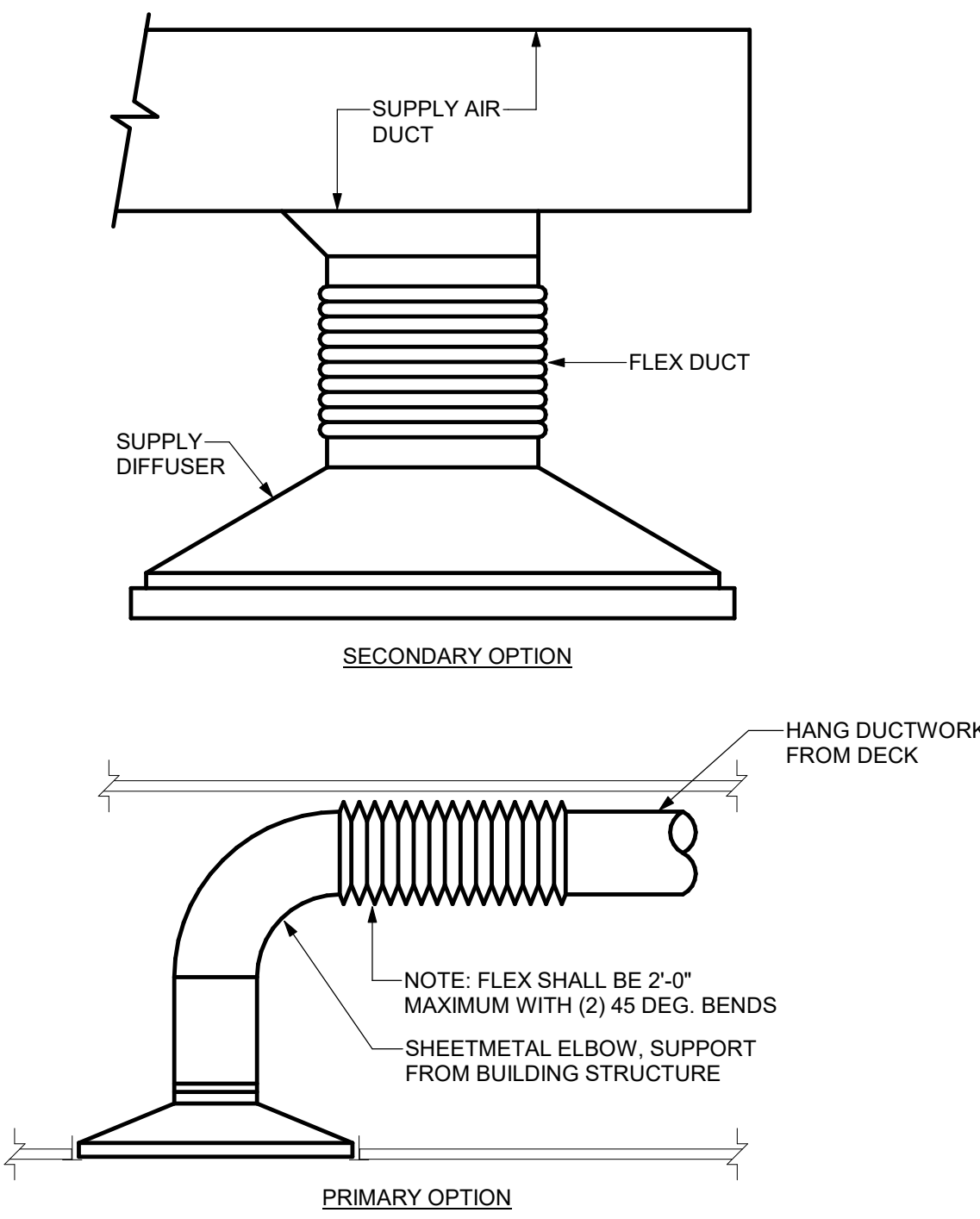
5 HEAT PUMP/FAN COIL CONDENSATE DRAIN DETAIL
NOT TO SCALE



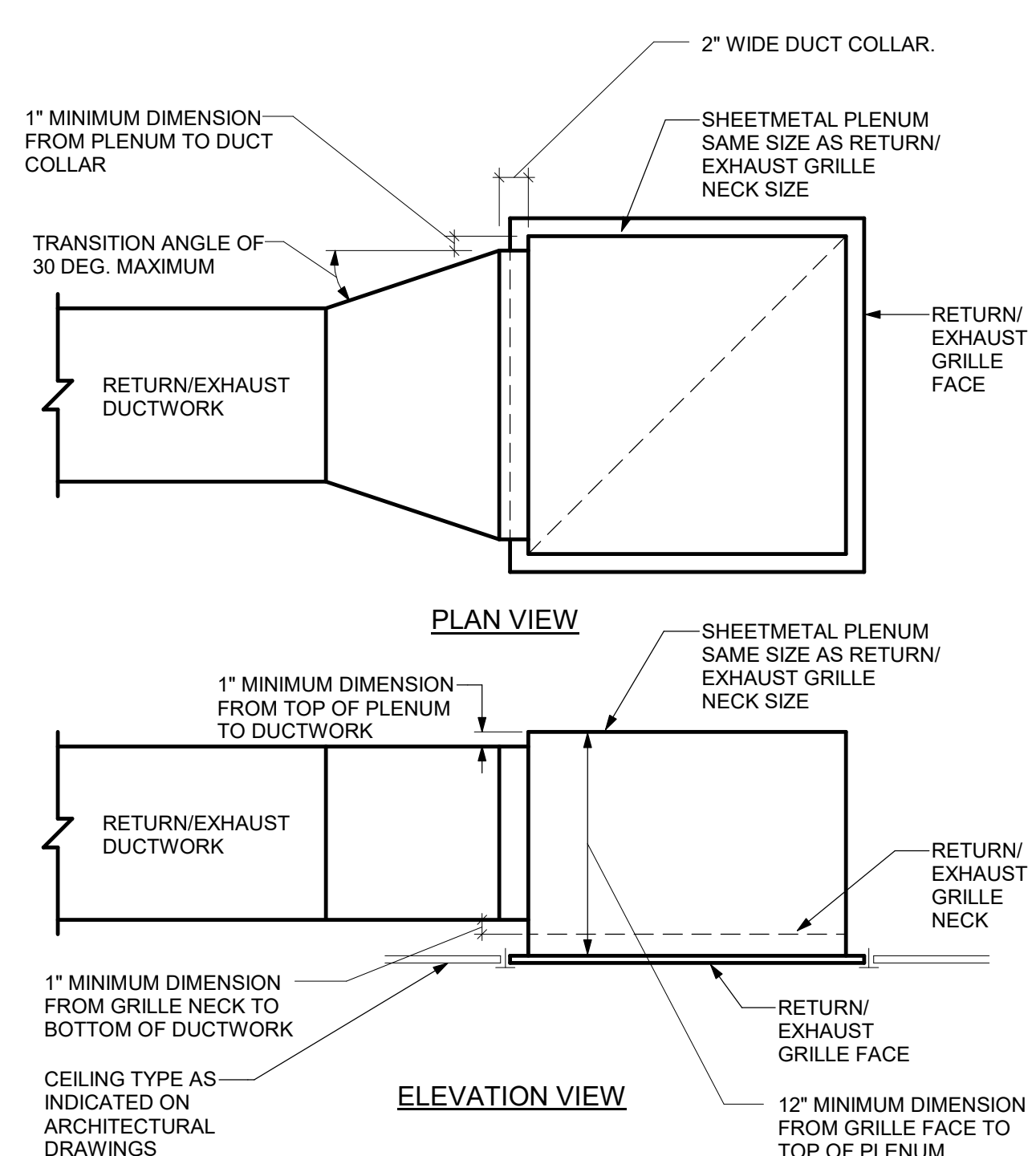
4 CONCENTRIC VENT TERMINATION KIT DETAIL - SIDEWALL
NOT TO SCALE



3 LOUVER PLENUM DETAIL
NOT TO SCALE



2 SUPPLY AIR DIFFUSER DETAIL - HORIZONTAL OR VERTICAL FLEXIBLE DUCT
NOT TO SCALE



1 RETURN/EXHAUST GRILLE PLENUM DETAIL - DUCTED
NOT TO SCALE

VAV - SINGLE DUCT - AIR TERMINAL UNIT SCHEDULE - ELECTRIC REHEAT

UNIT NO.	SERVICE	MAX AIR FLOW (CFM)	MIN AIR FLOW (CFM)	MIN INLET PRESS AT MAX CFM (In. WC)	INLET SIZE (In.)	RAD N.C. AT 1" S.P.	DISCH N.C. AT 1" S.P.	CAPACITY (KW)	NO. OF STEPS	AIR SIDE		ELEC. CHARACTERISTICS				MANUFACTURER & MODEL NO.	REMARKS		
										HEATING AIR FLOW (CFM)	ENT. AIR TEMP. (DEG. F)	LVG AIR TEMP. (DEG. F)	AIR P.D. (In. WC)	VOLTS	PHASE			MCA	MOP
VAV-1-1	RESTROOMS	555	350	1	12	15	22	7	SCR	555	55	94.9	0.03	208	3	24.3	25	TITUS DESV	1.2,3,4,5,6,7,8
VAV-1-2	PRESCHOOL/TODDLER/4-K	970	585	1	12	20	23	13	SCR	970	55	97.4	0.07	208	3	45.1	50	TITUS DESV	1.2,3,4,5,6,7,8
VAV-1-3	CORRIDOR/NURSEY/1-5	1120	675	1	12	22	24	15	SCR	1120	55	97.3	0.09	208	3	52	60	TITUS DESV	1.2,3,4,5,6,7,8

REMARKS

1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. MC TO VERIFY LH/RH IN FIELD PRIOR TO ORDER.
2. ELECTRIC REHEAT TO HAVE LYNERGY SCR CONTROLLER. COORDINATE CONTROLS SIGNAL.
3. PROVIDE UNITS WITH 1/2" FIBERGLASS LINER
4. PROVIDE UNITS WITH INTEGRAL NON-FUSED DISCONNECT SWITCH
5. PROVIDE UNITS WITH INTEGRAL 24V TRANSFORMER.
6. UNITS TO BE PROVIDED WITH INTEGRAL SOUND ATTENUATORS.
7. UNIT TO RUN AT MAXIMUM AIRFLOW DURING OCCUPIED HOURS. MINIMUM AIRFLOW MAY BE USED WHEN IN UNOCCUPIED MODE. SUPPLY AIR TEMPERATURE TO MODULATE TO MAINTAIN SPACE TEMPERATURE
8. UNIT CONTROLLER TO BE AAOB ORION CONTROL SYSTEM PRESSURE INDEPENDENT VAV CONE CONTROLLER PACKAGE. MODEL NUMBER (ASMO1628). PROVIDED BY MC.

FAN SCHEDULE

UNIT NO.	LOCATION	SERVICE	FAN CHARACTERISTICS						MOTOR CHARACTERISTICS						MANUFACTURER & MODEL NO.	REMARKS	
			TYPE	BLADE TYPE	CFM	S.P. (In. WC)	MAX BHP	FAN RPM	SONES	DRIVE	RPM	HP	VOLTS	HZ			PHASE
EF-0-1	MENS B106	MENS B106	INLINE	FC	100	0.3	-	-	1.5	DIRECT	922	SEE NOTE 2	115	60	1	COOK GC-148	1.2,3,4,7
EF-0-2	WOMENS B107	WOMENS B107	INLINE	FC	100	0.3	-	-	1.5	DIRECT	922	SEE NOTE 2	115	60	1	COOK GC-148	1.2,3,4,7
EF-0-3	ROOF	RESTROOM B111	DOWNBLAST	BI	125	0.35	-	1486	4.5	DIRECT	1550	1/20	115	60	1	COOK ACED 70C15DH	1,4,5,6
EF-1-1	ROOF	FIRST FLOOR	DOWNBLAST	BI	1100	0.5	0.145	1040	7.0	DIRECT	1075	1/6	115	60	1	COOK ACED 135C10D	1,4,5,6

REMARKS

1. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
2. FAN INPUT WATTS: 39
3. FAN TO BE PROVIDED WITH INTEGRAL BACK DRAFT DAMPER.
4. PROVIDE PREWIRED INTEGRAL SPEED CONTROLLER WITH FAN FOR BALANCING.
5. PROVIDE FAN CURB BY FAN MANUFACTURER.
6. PROVIDE PRE-WIRED DISCONNECT SWITCH WITH FAN.
7. PROVIDE WCR-6 WALL CAP WITH INTEGRAL WIND GUARD WITH FAN.

PACKAGED ENERGY RECOVERY VENTILATION UNIT SCHEDULE - STATIC PLATE CORE HEAT EXCHANGER

UNIT NO.	LOCATION	SERVICE	MODE	SUPPLY FAN		EXHAUST FAN		ELECTRICAL CHARACTERISTICS				TOTAL EFF. (%)	PERFORMANCE CONDITIONS						MANUFACTURER & MODEL No.	REMARKS
				AIR FLOW (CFM)	E.S.P. (In. Wc)	AIR FLOW (CFM)	E.S.P. (In. Wc)	VOLTS	PHASE	MCA	MOP		O.A.		R.A.		S.A.			
													DB	WB	DB	WB	DB	WB		
ERV-0-1	MECHANICAL SPRINKLER B104A	BASEMENT VENTILATION	SUMMER	1000	1.1	1000	1.17	208	3	5	15	52.7	92	74	75	62.5	79.8	68.3	RENEWAIRE HE1.5JINV-D3SSS-DANT-L	1,2,3,4,5
			WINTER	1000	1.1	1000	1.17					68.3	9	6.1	70	54.3	52.6	42.5		

REMARKS

1. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
2. PROVIDE EK SERIES DUCT HEATER FROM ERV MANUFACTURER WITH UNIT. SEE ERV DUCT MOUNTED HEATER SCHEDULE.
3. PROVIDE INSULATED DAMPERS INTEGRATED WITHIN THE UNIT FOR OUTSIDE AND EXHAUST AIR CONNECTIONS.
4. UNIT TO BE PLACED ON A CONCRETE EQUIPMENT PAD EXTENDING A MINIMUM OF 6" AROUND EDGES OF UNIT.
5. UNIT TO BE PROVIDED WITH INTEGRAL NON-FUSED DISCONNECT.

LOUVER SCHEDULE

UNIT NO.	LOCATION	SERVICE	TYPE	MATERIAL	FINISH	FREE AREA (Sq. Ft.)	DIMENSIONS (APPROX.)			AIR PERFORMANCE			MANUFACTURER & MODEL NO.	REMARKS
							WIDTH (in.)	HEIGHT (in.)	DEPTH (in.)	AIR FLOW (CFM)	VEL (FPM)	MAX P.D. (In. W.G.)		
L-0-1	B104A	ERV-0-1	FIXED DRAINABLE BLADE	ALUMINUM	BAKED ENAMEL	1.4	24	20	4	1,000	706	0.086	GREENHECK ESD-401	1.2
L-0-2	B104A	ERV-0-1	FIXED DRAINABLE BLADE	ALUMINUM	BAKED ENAMEL	1.4	24	20	4	1,000	706	0.072	GREENHECK ESD-401	1.2

REMARKS:

1. PROVIDE BIRD SCREEN. SCREEN SIZE TO BE 0.5"
2. PROVIDE QUANTITIES AS SHOWN ON PLANS.

DUCTLESS SPLIT HEAT PUMP UNIT SCHEDULE

INDOOR UNIT TAG	OUTDOOR UNIT TAG	INDOOR UNIT LOCATION	OUTDOOR UNIT LOCATION	UNIT MODE	INDOOR UNIT										OUTDOOR UNIT					ELECTRICAL				EFFICIENCY		MANUFACTURER & MODEL No.		REMARKS
					UNIT TYPE	AIR FLOW (CFM)	Q.A CFM	EXT S.P. (In. WC)	COOLING CAPACITY (MBH)	MINIMUM CAPACITY (MBH)	EAT (DEG. F)		SOUND PRESSURE (dBA)	REFRIGERANT	EAT (DEG. F)		SOUND PRESSURE (dBA)	VOLTS	PHASE	MCA	BREAKER SIZE (AMPS)	MINIMUM SEER (COOLING)	MINIMUM COP (HEATING)	INDOOR UNIT	OUTDOOR UNIT			
											DB	WB			DB	WB												
IDU-1-1	ODU-1-1	1208 CONTROL ROOM	OUTSIDE GRADE	COOLING HEATING	WALL MOUNTED WALL MOUNTED	194 233	0 0	0 0	9 12	4.4 4.4	80 70	67 60	25 28	R-410A	95.0 47	75.0 43	47 48	208	1	8	15	24.5	4.46	DAIKIN FTXS09LVJU	DAIKIN RXS09LVJU	1,2,3,4,5,6		

REMARKS:

1. UNIT TO BE PROVIDED WITH ASPEN PUMPS MINI LIME UNIVOLIT MINI SPLIT CONDENSATE PUMP 120v MODEL: ASPMLUNI
2. INDOOR UNIT AIR FLOW AND SOUND DATA IS TAKEN FROM THE LOW FAN SPEED SELECTION.
3. UNIT TO BE PROVIDED WITH WIRELESS REMOTE THERMOSTAT CONTROLLER AND WALL MOUNT BRACKET.
4. PROVIDE STAND TO MOUNT ODU-11 A MINIMUM OF 18" ABOVE ROOF LEVEL. QUOTE SLIDING OR EQUAL.
5. PROVIDE LOW AMBIENT KIT TO THE OUTDOOR UNIT INCLUDING WIND BAFFLE AND LOW AMBIENT SETTINGS.
6. EC TO PROVIDE DISCONNECT.

PACKAGED ROOFTOP AIR HANDLING UNIT SCHEDULE - DX /GAS

UNIT NO.	LOCATION	SERVICE	SUPPLY FAN										FAN CHARACTERISTICS										GAS PURNACE										PRE-FILTER				FINAL FILTER		UNIT ELEC. CHARACTERISTICS						MANUFACTURER & MODEL No.	REMARKS
			AIR FLOW (CFM)	DESIGN O.A.F. (CFM)	MIN O.A.F. (CFM)	EXT. STATIC (IN. WC)	TOTAL STATIC (IN. WC)	TYPE	FAN NO. & MIN DIA.	MAX BHP	MOTOR HP	MOTOR RPM	DRIVE	TOTAL CAPACITY (MBH)	SENS CAPACITY (MBH)	EAT (DEG. F)		LAT (DEG. F)		FACE VEL (FPM)	ROWS	FINS PER INCH	AIR P.D. (IN. WC)	AIR SIDE		GAS		EFFICIENCY		WIDTH	MERV RATING	WIDTH	MERV RATING	VOLTS	PHASE	FLA	MCA	MOP								
																DB	WB	DB	WB					ENT. AIR TEMP (DEG. F)	LVG. AIR TEMP (DEG. F)	INPUT CAP. (MBH)	OUTPUT CAP. (MBH)	MIN. GAS PRESSURE BEFORE REGULATOR (IN. W.C.)	MIN (%)										TEST PROCEDURE							
RTU-1-1	ROOF	FIRST FLOOR CLASSROOMS	2645	1585	250	1.25	2.07	BACKWARD CURVED	1-18.5"	1.55	2	1839	130.6	89.1	85.2	69.6	54.6	53.6	181.4	6	12	0.15	23.1	77.7	195	156	10:1	6"-10.5"	80	ANSI Z21.47B	2"	8	4"	13	208	3	46	50	60	AAON RN-011-8-0-EB09-3FB	1,2,3,4,5,6,7,8,9,10,11					
RTU-1-2	ROOF	FIRST FLOOR COMMONS/CAFE	3200	1855	250	1	2.68	BACKWARD CURVED	1-18.5"	2.9	3	1692	121.0	91.9	79.5	65.5	54.8	53.34	376.2	6	14	0.53	48.0	96.6	210	168	11:1	6"-10.5"	80	ANSI Z21.47B	2"	8	4"	13	208	3	46	55	80	AAON RN-010-8-0-EB09-3LB	1,2,3,4,5,6,7,8,9,10,11					

REMARKS:

1. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
 2. PROVIDE ECONOMIZER SECTION, OUTSIDE AIR INLET TO HAVE BIRD SCREEN WITH 0.5" OPENING.
 3. PROVIDE ENTHALPHY ECONOMIZER CONTROL.
 4. PROVIDE VARIABLE CAPACITY DIGITAL SCROLL COMPRESSORS AND MODULATING HOT GAS REHEAT SECTION FOR HUMIDITY CONTROL.
 5. UNIT TO HAVE MODULATING GAS FURNACE SECTION.
 6. PROVIDE FAN MOTOR WITH VFD CONTROLS
 7. PROVIDE NON-FUSED DISCONNECT SWITCH
 8. PROVIDE 115V CONVENIENCE OUTLET
 9. CONDENSATE TRAP AND DRAIN BY MC.
 10. PROVIDE UNIT WITH INTERNAL VIBRATION ISOLATORS FOR THE COMPRESSORS AND FANS.
 11. RTU TO BE CONTROLLED BY AAOA ORION CONTROL SYSTEM INCLUDING ZONE TEMPHUMIDITY SENSOR (ASMO1820) AND CO2 SENSOR (ASMO1698), VCCX-2 CONTROLLERS (ASMO1698), AND MAIN SYSTEM MANAGER (ASMO1900).
 12. RTU TO BE CONTROLLED BY AAOA ORION CONTROL SYSTEM INCLUDING ZONE TEMPHUMIDITY SENSOR (ASMO1820) AND DUCT MOUNTED CO2 SENSOR, VCCX-2 CONTROLLERS (ASMO1698), AND MAIN SYSTEM MANAGER (ASMO1900).

AIR HANDLING UNIT SCHEDULE

UNIT NO.	LOCATION	SERVICE	SUPPLY FAN										POWER EXHAUST FAN											
			AIR FLOW (CFM)	DESIGN O.A. (CFM)	MIN O.A. (CFM)	EXT. STATIC (in. WC)	TOTAL STATIC (in. WC)	FAN CHARACTERISTICS				MOTOR		AIR FLOW (CFM)	EXT. STATIC (in. WC)	TOTAL STATIC (in. WC)	FAN CHARACTERISTICS				MOTOR			
								TYPE	FAN NO. & MIN DIA.	MAX BHP	FAN RPM	DRIVE	HP				STARTER	TYPE	FAN NO. & MIN DIA.	MAX BHP	FAN RPM	DRIVE	HP	STARTER
AHU-1-1	OUTSIDE GRADE	115 WORSHIP	8100	3645	300	1	3.8	BACKWARD CURVED	1 - 24.5"	8.23	1639	DIRECT	15	VFD	8100	0.5	2.14	BACKWARD CURVED	1 - 22"	7.63	1614	DIRECT	10	VFD

AIR HANDLING UNIT SCHEDULE - CONTINUED

COOLING COIL (DX)		GAS FURNACE										EFFICIENCY				PREFILTER		FINAL FILTER		UNIT ELECTRICAL CHARACTERISTICS					MANUFACTURER & MODEL No.	REMARKS		
TOTAL CAPACITY (MBH)	SENS CAPACITY (MBH)	EAT (DEG. F)		LAT (DEG. F)		FACE VEL (FFM)	ROWS	FINS PER INCH	AIR P.D. (In. WC)	AIR SIDE		GAS		CAPACITY CONTROL (TURN DOWN RATIO)	MIN. GAS PRESSURE BEFORE REGULATOR (In. W.C.)	MIN (%)	TEST PROCEDURE	WIDTH	MERV RATING	WIDTH	MERV RATING	VOLTS	PHASE	FLA			MCA	MOP
		ENT. AIR TEMP (DEG. F)	LVG. AIR TEMP (DEG. F)	INPUT CAP. (MBH)	OUTPUT CAP. (MBH)																							
302.9	227.0	77.0	63.8	53.2	51.4	407.8	6	12	0.53	58.4	96	405	328.1	13:1	6"-10.5"	80	ANSI Z21.47B	2"	8	4"	13	208	3	182	195	225	AAON RNA-025-C-0-8-DAB0A-DB2L0	1,2,3,4,5,6,7,8,9,10,11,12

REMARKS:

1. INSTALL PER MANUFACTURER'S INSTRUCTIONS
2. PROVIDE LOW NOISE CONDENSER FAN.
3. PROVIDE FULLY MODULATING ECONOMIZER AND BYPASS DAMPER AND 0.5" BIRD SCREEN. PROVIDE ENTHALPY ECONOMIZER CONTROL.
4. PROVIDE ENERGY RECOVERY WHEEL SECTION. SEE ADDITIONAL SCHEDULE.
5. PROVIDE VARIABLE CAPACITY DIGITAL SCROLL COMPRESSORS AND HOT GAS REHEAT SECTION FOR HUMIDITY CONTROL.
6. PROVIDE MODULATING GAS FURNACE SECTION.
7. PROVIDE NON-FUSED DISCONNECT.
8. PROVIDE WITH 115V CONVENIENCE OUTLET.
9. CONDENSATE TRAP AND DRAIN BY MC.
10. PROVIDE UNIT WITH INTERNAL VIBRATION ISOLATORS FOR THE COMPRESSORS AND FANS.
11. PROVIDE FAN MOTOR WITH VFD CONTROLS
12. AHU TO BE CONTROLLED BY AACH ORION CONTROL SYSTEM. INCLUDING ZONE TEMP/HUMIDITY SENSOR (ASM01820) AND CO2 SENSOR (ASM01829), VCXX-2 CONTROLLER (ASM01698), AND MAIN SYSTEM MANAGER (ASM01900).

AHU-1-1 ENERGY RECOVERY UNIT SCHEDULE - WHEEL

WINTER DESIGN CONDITIONS																									SUMMER DESIGN CONDITIONS																									REMARKS
UNIT NO.	OUTSIDE AIR ENT.				SUPPLY AIR LVG.				RETURN AIR ENT.				EXHAUST AIR LVG.				OUTSIDE AIR ENT.				SUPPLY AIR LVG.				RETURN AIR ENT.				EXHAUST AIR LVG.																					
	AIR FLOW (CFM)	D.B. (DEG.F)	W.B. (DEG.F)		AIR FLOW (CFM)	D.B. (DEG.F)	W.B. (DEG.F)		AIR FLOW (CFM)	D.B. (DEG.F)	W.B. (DEG.F)		AIR FLOW (CFM)	D.B. (DEG.F)	W.B. (DEG.F)		AIR FLOW (CFM)	D.B. (DEG.F)	W.B. (DEG.F)		AIR FLOW (CFM)	D.B. (DEG.F)	W.B. (DEG.F)		AIR FLOW (CFM)	D.B. (DEG.F)	W.B. (DEG.F)																							
AHU-1	3645	-7	-8		3645	46.7	(36.8)		3645	45.5	68	50	3645	12.2	11.8		3645	92	74	3645	79.4	65.9	45.5	75	62	3645	87.5	70.8																						

UNIT HEATER SCHEDULE - ELECTRIC

UNIT NO.	LOCATION	TYPE	CAPACITY MBH	AIR SIDE		ELEC CHARACTERISTICS					MANUFACTURER & MODEL No.	REMARKS
				AIR FLOW (CFM)	MOUNTING HEIGHT (Ft.-In.)	CAPACITY (WATTS)	VOLTS	PHASE	FLA	MOP		
EUH-0-1	B106 MEN	BASEBOARD	1.4	-	FLOOR LEVEL	400	208	1	2.0	15	QMARK 2502NW	1.2,4,6
EUH-0-2	B107 WOMEN	BASEBOARD	1.4	-	FLOOR LEVEL	400	208	1	2.0	15	QMARK 2502NW	1.2,4,6
EUH-0-3	B104 STORAGE / RESOURCE ROOM	BASEBOARD	1.7	-	FLOOR LEVEL	500	208	1	2.4	15	QMARK 2502NW	1.2,4,6
EUH-0-4	B104A MECHANICAL SPRINKLER	WALL MOUNT	3.4	65	2'	1000	120	1	8.4	15	QMARK CWH1101DSF	1.3,4,5,6
EUH-0-5	B112 ELEC DATA / IT	WALL MOUNT	3.4	65	2'	1000	120	1	8.4	15	QMARK CWH1101DSF	1.3,4,5,6
EUH-0-6	B117A STORAGE	BASEBOARD	1.4	-	FLOOR LEVEL	400	208	1	2.0	15	QMARK 2502NW	1.2,4,6
EUH-1-1	104A UTILITY	WALL MOUNT	3.4	65	2'	1000	120	1	8.4	15	QMARK CWH1101DSF	1.3,4,5,6
EUH-1-2	105 ASSIST. RR	BASEBOARD	1.4	-	FLOOR LEVEL	400	208	1	2.0	15	QMARK 2502NW	1.2,4,6
EUH-1-3	110A RR	BASEBOARD	1.4	-	FLOOR LEVEL	400	208	1	2.0	15	QMARK 2502NW	1.2,4,6
EUH-1-4	113A RR	BASEBOARD	1.4	-	FLOOR LEVEL	400	208	1	2.0	15	QMARK 2502NW	1.2,4,6
EUH-1-5	102 VEST	WALL MOUNT	6.8	100	1'-6"	2000	208	1	9.6	15	QMARK AVH4408F	1.2,4,5,6
EUH-1-6	101 VEST	WALL MOUNT	13.7	100	1'-6"	4000	208	3	11.1	15	QMARK AVH44083F	1.2,4,5,6
EUH-1-7	112 STAIR	WALL MOUNT	6.8	100	1'-6"	2000	208	1	9.6	15	QMARK AVH4408F	1.2,4,5,6

REMARKS:

1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2. PROVIDE WITH ADJUSTABLE, TAMPER RESISTANT THERMOSTAT. INTEGRAL ON AWH MODELS. MC TO INSTALL ON 2500 BASEBOARD MODELS.
3. PROVIDE WITH INTEGRAL ADJUSTABLE THERMOSTAT.
4. PROVIDE INTEGRAL NON-FUSED DISCONNECT.
5. MOUNTING HEIGHT IS MEASURED FROM FINISHED FLOOR TO BOTTOM OF HEATER.
6. COORDINATE COLOR SELECTION WITH ARCHITECT.

ERV DUCT MOUNTED ELECTRIC HEATER

UNIT NO.	TYPE	AIR SIDE			ELEC CHARACTERISTICS						MODEL No.	REMARKS
		AIR FLOW (CFM)	ENTERING AIR TEMP (DEG. F)	LEAVING AIR TEMP (DEG. F)	CAPACITY (KW)	VOLTS	PHASE	FLA	MCA	MOP		
ERV-0-1	DUCT MOUNTED	1000	50	72	7	208	3	19.43	24.29	25	EK-1818007SCCHR-23-15V-N	1,2,3

REMARKS:

1. PROVIDE SCR CONTROL WITH THERMOSTAT AND SENSOR WITH UNIT.
2. UNIT TO INCLUDE INTEGRAL AIRFLOW SWITCH.
3. EC TO PROVIDE NON-FUSED DISCONNECT.

REGISTER GRILLE AND DIFFUSER SCHEDULE

TYPE	APPLICATION	MATERIAL	FINISH	MANUFACTURER & MODEL NO.	REMARKS
1	SUPPLY	ALUMINUM	WHITE	TITUS TMS-AA	1.2
2	SUPPLY	ALUMINUM	BLACK	TITUS 272FL	1.2
A	RETURNEXHAUST	ALUMINUM	WHITE	TITUS PAR-AA	1.2
B	RETURNEXHAUST	ALUMINUM	SEE REMARK 2	TITUS 350FL	1.2
C	RETURNEXHAUST	ALUMINUM	BLACK	TITUS 350FS	1.2

REMARKS:

1. COORDINATE MOUNTING AND BORDER STYLE BASED APPLICATION AND ARCHITECT'S FINAL CEILING PLAN.
2. COORDINATE COLOR SELECTION WITH ARCHITECT PRIOR TO ORDERING. WHERE GRILLE/DIFFUSER INSTALLED WITHIN LAY-IN CEILING, COLOR WILL BE STANDARD WHITE. WHERE GRILLE IS INSTALLED IN EXPOSED DUCTWORK, COLOR WILL BE STANDARD BLACK.



VRF SPLIT SYSTEM AIR CONDITIONING UNIT SCHEDULE - OUTDOOR - AIR COOLED

UNIT NO.	LOCATION	SERVICE	COOLING CHARACTERISTICS			HEATING CHARACTERISTICS			SOUND PRESSURE (dBA)	REFRIGERANT	ELECTRICAL CHARACTERISTICS				NO. OF MODULES	MANUFACTURER & MODEL No.	REMARKS
			NOMINAL CAPACITY (MBH)	O.A. TEMP. (DEG. F)	CORRECTED CAPACITY (MBH)	NOMINAL CAPACITY (MBH)	O.A. TEMP. (DEG. F)	CORRECTED CAPACITY (MBH)			VOLTS	PHASE	MCA	MOP			
ODU-0-1	LOADING DOCK	BASEMENT	96	92	91.3	108	13.0	119.1	58	R-410A	208	3	28.5	40	1	LG ARUM096BTE5	1,2,3,4

- REMARKS:
1. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
 2. UNIT TO BE PROVIDED WITH AIR GUIDE HOOD AND HAIL GUARD KIT BY MANUFACTURER.
 3. MOUNT UNIT ON 18" STEEL STAND. COORDINATE WITH MANUFACTURER.
 4. EC TO PROVIDE FUSED DISCONNECT

VRF SPLIT SYSTEM AIR CONDITIONING UNIT SCHEDULE - HEAT RECOVERY UNIT

UNIT NO.	LOCATION	SERVICE	NUMBER OF INDOOR UNIT PORTS	MAX SOUND PRESSURE (dBA)	ELECTRICAL CHARACTERISTICS			MANUFACTURER & MODEL No.	REMARKS
					VOLTS	PHASE	RLA		
HRU-0-1	B104A MECHANICAL SPRINKLER	IDU-0-1, IDU-0-2, IDU-0-6	3	38	208	1	0.06	LG PRHR033A	1,2
HRU-0-2	B104A MECHANICAL SPRINKLER	IDU-0-3, IDU-0-4A, IDU-0-4B, IDU-0-5	4	38	208	1	0.06	LG PRHR043A	1,2

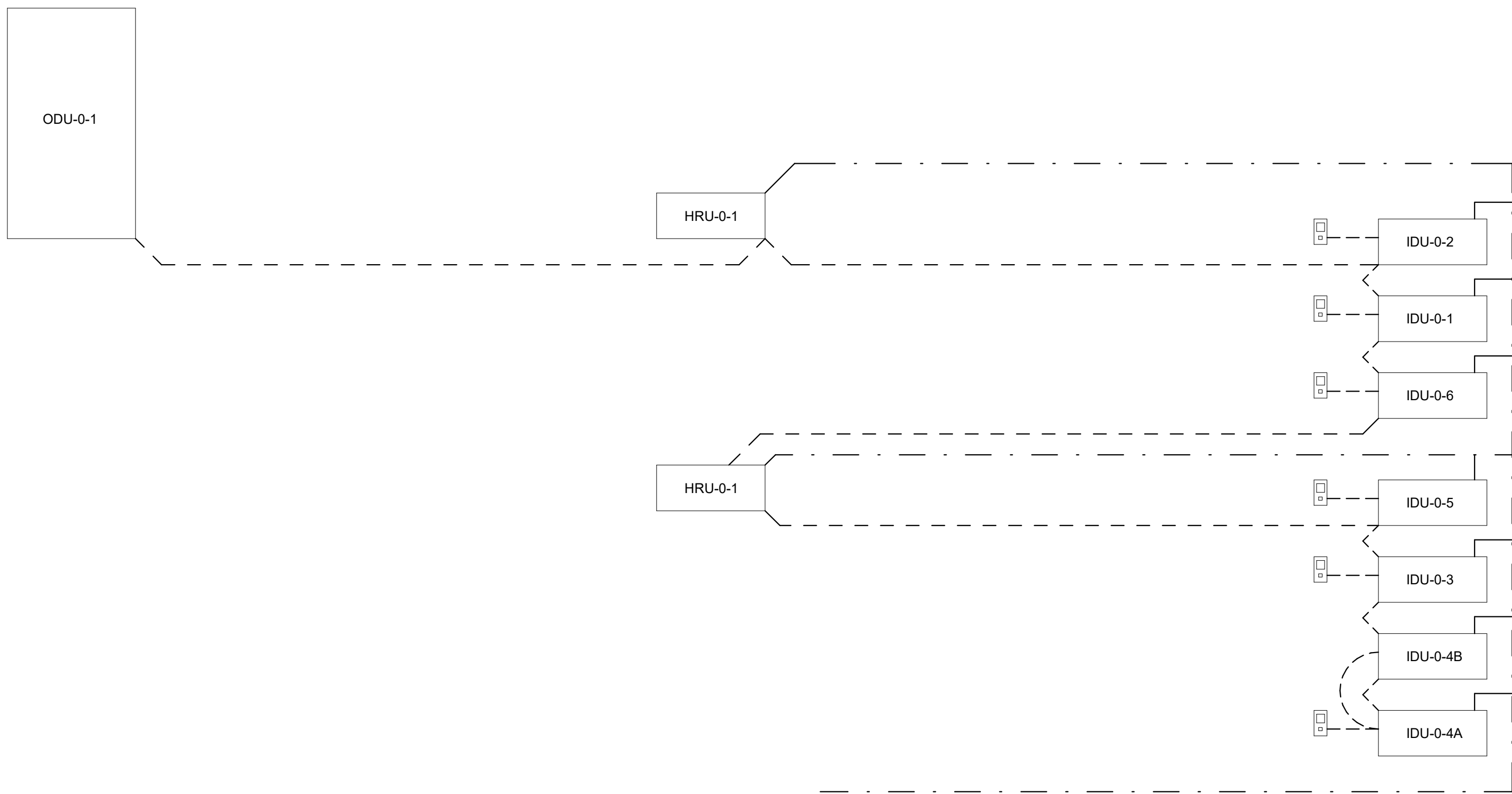
- REMARKS:
1. INSTALL PER MANUFACTURER'S INSTRUCTIONS
 2. EC TO PROVIDE NON-FUSED DISCONNECT

VRF SPLIT SYSTEM AIR CONDITIONING UNIT SCHEDULE - INDOOR

UNIT NO.	SERVICE	UNIT TYPE	AIR FLOW (CFM)	MAX. EXT. S.P. (IN. W.C.)	COOLING CHARACTERISTICS				HEATING CHARACTERISTICS				SOUND PRESSURE (dBA)	ELECTRICAL CHARACTERISTICS			MANUFACTURER & MODEL No.	REMARKS			
					NOMINAL CAPACITY (MBH)	CORRECTED TOTAL CAPACITY (MBH)	SENS (MBH)	EAT (DEG. F)	DB	WB	DB	NOMINAL CAPACITY (MBH)		CORRECTED CAPACITY (MBH)	E.A.T. (DEG. F)	L.A.T. (DEG. F)			VOLTS	PHASE	RLA
IDU-0-1	OFFICES	VERTICAL AHU	480	1.0	18.0	12.7	9.7	75	62.5	56	20.0	17.1	68	101	41	208	1	1.12	1.40	LG ARNU183NJA4	2,3,5,6,7
IDU-0-2	OPEN OFFICE	WALL MOUNTED	208	N/A	9.6	8.2	6.6	75	62.5	53	10.9	11.2	68	106	28	208	1	0.25	0.31	LG ARNU093SJA4	1,2,3,7
IDU-0-3	VOLUNTEER	WALL MOUNTED	208	N/A	9.6	8.2	6.6	75	62.5	53	10.9	11.2	68	106	28	208	1	0.25	0.31	LG ARNU093SJA4	1,2,3,7
IDU-0-4A	CLASSROOM	WALL MOUNTED	240	N/A	15.4	13.1	10.1	75	62.5	50	17.1	17.7	68	112	32	208	1	0.25	0.31	LG ARNU153SJA4	1,2,3,4,7
IDU-0-4B	CLASSROOM	WALL MOUNTED	240	N/A	15.4	13.1	10.1	75	62.5	50	17.1	17.7	68	112	32	208	1	0.25	0.31	LG ARNU153SJA4	1,2,3,4,7
IDU-0-5	LOBBY	VERTICAL AHU	630	1.0	30.0	18.2	14.0	75	62.5	54	34.0	25.1	68	105	42	208	1	1.12	1.40	LG ARNU303NJA4	2,3,5,6,7
IDU-0-6	GREEN ROOM	WALL MOUNTED	371	N/A	19.1	16.3	12.4	75	62.5	52	21.5	22.2	68	110	34	208	1	0.52	0.65	LG ARNU183SKA4	1,2,3,7

- REMARKS:
1. PROVIDE ASPEN PUMPS MINI WHITE UNIVOLT 120V CONDENSATE PUMP WITH UNIT. MOUNT PER RECOMMENDATIONS FROM BOTH PUMP AND INDOOR UNIT MANUFACTURERS.
 2. UNIT TO BE PROVIDED WITH WALL MOUNTED CONTROLLER FOR UNIT FUNCTION CONTROL, TEMPERATURE CONTROL, AND SCHEDULING. MODEL NUMBER: PREMTBVC0
 3. SOUND CHARACTERISTICS ARE BASED UPON LOW FAN SPEED.
 4. PROVIDE LG GROUP CONTROL KIT TO CONTROL BOTH UNITS WITHIN THE SPACE VIA A SINGLE CONTROLLER.
 5. UNIT TO BE PROVIDED WITH 16X20X1 MERV 8 DISPOSIBLE FILTER.
 6. MC TO PROVIDE STEEL STAND TO SUPPORT UNIT SUCH THAT THE RETURN DUCTWORK CAN BE PROPERLY ROUTED TO THE CONNECTION ON THE BOTTOM. COORDINATE WITH MANUFACTURER.
 7. EC TO PROVIDE NON-FUSED DISCONNECT.

- Power line(Indoor unit / HR unit) (FURNISHED BY EC)
Communication line (ODU-IDU / ODU-ODU) : Stranded and shielded AWG 18 x 2C

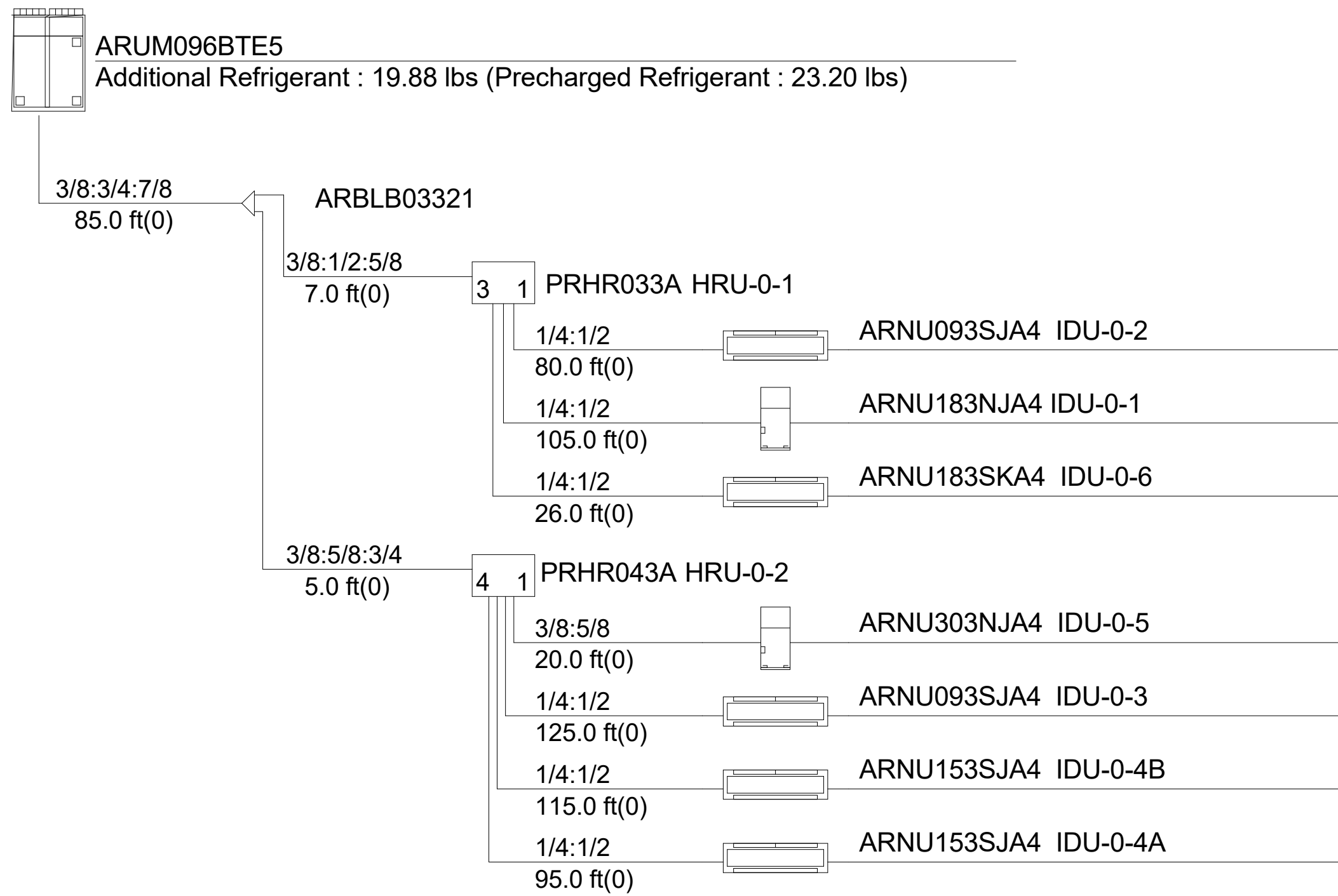


NOTES:

1. EC TO PROVIDE POWER WIRING. MC TO PROVIDE CONTROLS WIRING. COORDINATE WITH EC.
2. SYSTEM TREE IS BASED ON THE BASIS OF DESIGN SYSTEM AND IS FOR REFERENCE ONLY. COORDINATE FINAL WIRING WITH EQUIPMENT MANUFACTURER.
3. IF ALTERNATE MANUFACTURER IS USED, THIS DIAGRAM SHALL NOT BE USED. CONTRACTOR TO COORDINATE WITH EQUIPMENT MANUFACTURER FOR ALL INFORMATION.
4. POWER WIRING, BREAKER SIZE, AND DISCONNECTS SHOULD FOLLOW LOCAL CODE AND NEC.

VRF SYSTEM WIRING DIAGRAM

2 NTS



NOTES:

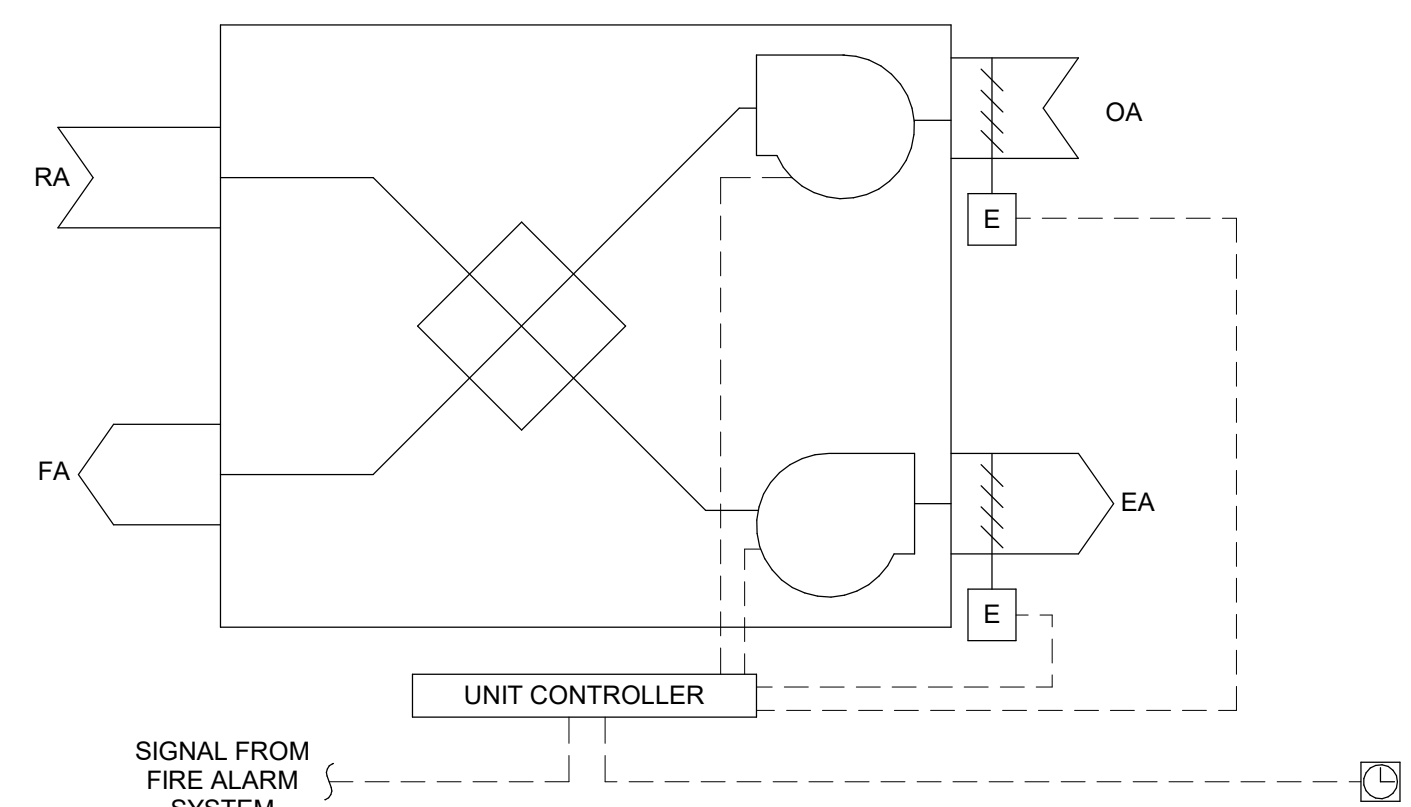
1. SYSTEM TREE IS BASED ON THE BASIS OF DESIGN SYSTEM AND IS FOR REFERENCE ONLY.
2. COORDINATE FINAL SYSTEM LAYOUT WITH EQUIPMENT MANUFACTURER TO CONFIRM PIPING LENGTHS, PIPING SIZES, AND REFRIGERANT CHARGE.
3. IF ALTERNATE MANUFACTURER IS USED, THIS DIAGRAM SHALL NOT BE USED. CONTRACTOR TO COORDINATE WITH EQUIPMENT MANUFACTURER FOR ALL INFORMATION.

VRF SYSTEM TREE

1 NTS



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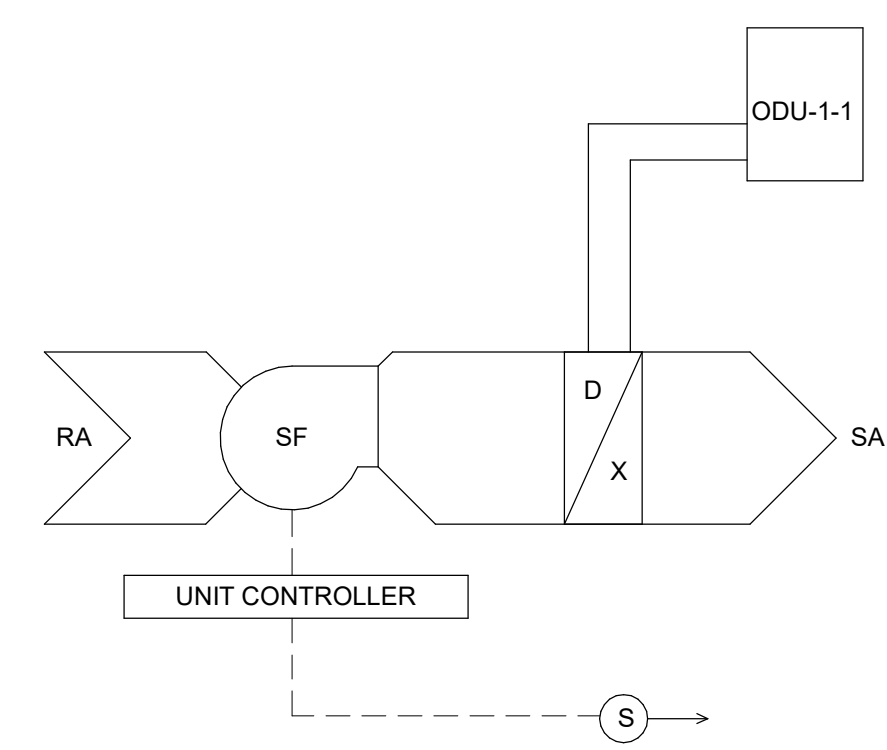


ENERGY RECOVERY VENTILATOR CONTROLS SEQUENCE:

- A. RUN CONDITIONS - THE FAN SHALL BE ENERGIZED UPON SIGNAL FROM AN AUTOMATED TIMECLOCK BY MC. TIMECLOCK TO BE 7-DAY PROGRAMMABLE AND FULLY ADJUSTABLE. COORDINATE WITH EC FOR POWER TIE-IN.
1. TIMECLOCK TO BE INITIALLY SCHEDULED TO BE RUN FROM 9AM - 5PM (ADJ.) COORDINATE OCCUPANCY SCHEDULE WITH OWNER'S REPRESENTATIVE.
- B. FIRE ALARM SHUTDOWN:
1. THE UNIT SHALL SHUT DOWN AND UPON RECEIVING A SIGNAL FROM THE FIRE ALARM SYSTEM.

5 ERV-0-1 CONTROL SEQUENCE

5 NTS



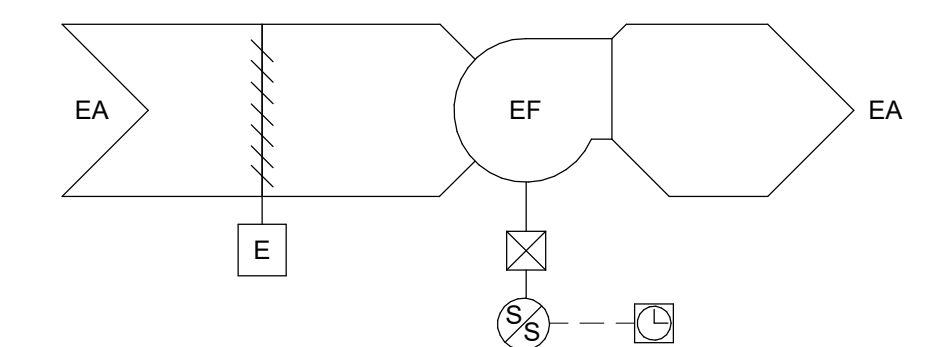
4 IDU-1-1 CONTROL SEQUENCE

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NTS

- EXHAUST FAN CONTROLS SEQUENCE:**

- ### 3 EF-0-3 CONTROL SEQUENCE

3



EXHAUST FAN CONTROLS SEQUENCE:

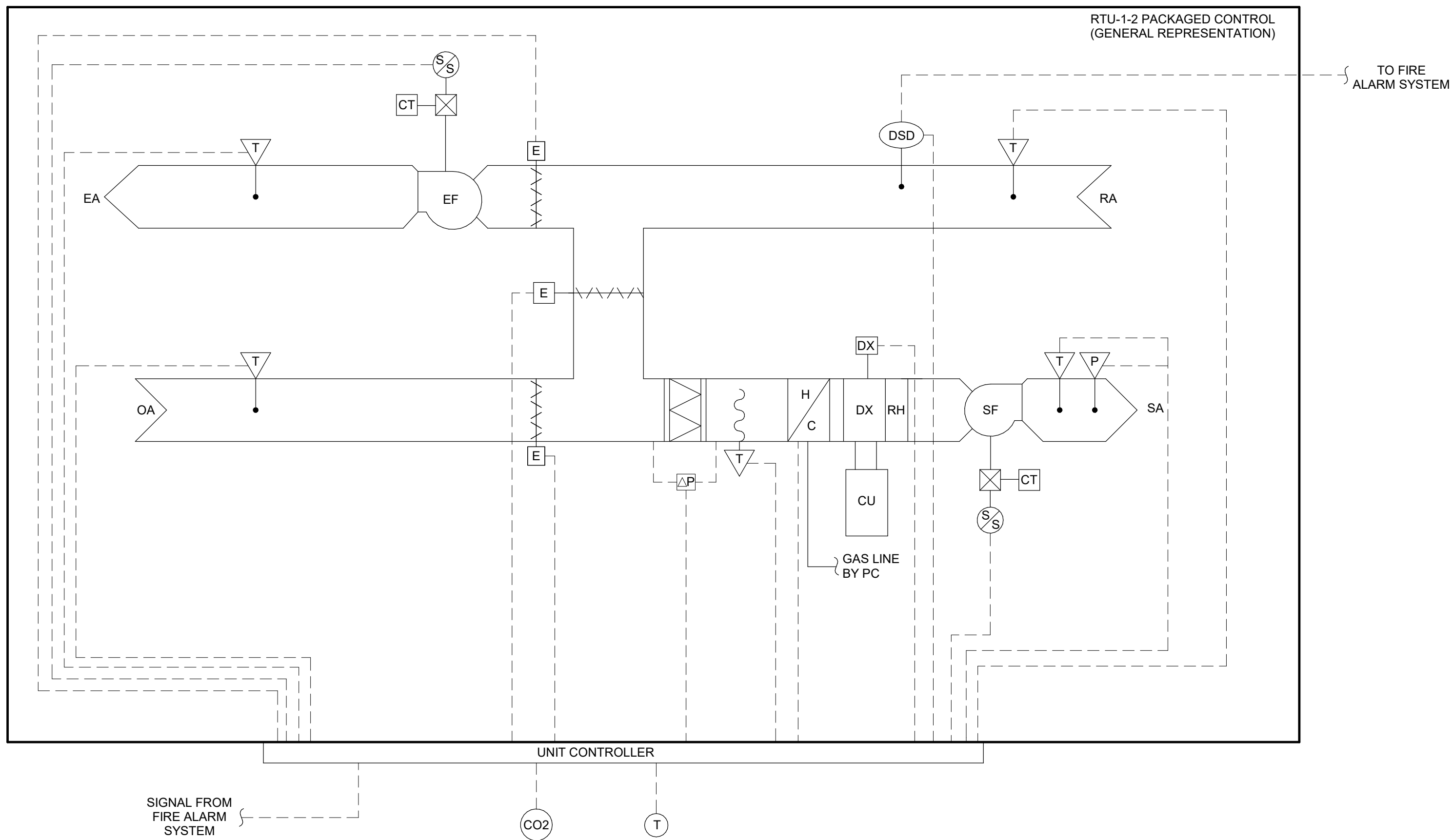
- A. RUN CONDITIONS - THE FAN SHALL BE ENERGIZED UPON SIGNAL FROM AN AUTOMATED TIME-LOG BY MC. TIME-LOG TO BE 7 DAY PROGRAMMABLE AND FULLY ADJUSTABLE. COORDINATE WITH EC FOR POWER TIE-IN.
1. TIME-LOG TO BE INITIALLY SCHEDULED TO BE RUN FROM 9AM - 5PM (ADJ.) COORDINATE OCCUPANCY SCHEDULE WITH OWNER'S REPRESENTATIVE.
- B. MOTORIZED DAMPER TO BE WIRED IN PARALLEL WITH THE FAN MOTOR SUCH THAT WHEN THE FAN IS ENERGIZED, THE DAMPER ACTUATOR IS ENERGIZED.

1 EF-1-1 CONTROL SEQUENCE

2 NTS

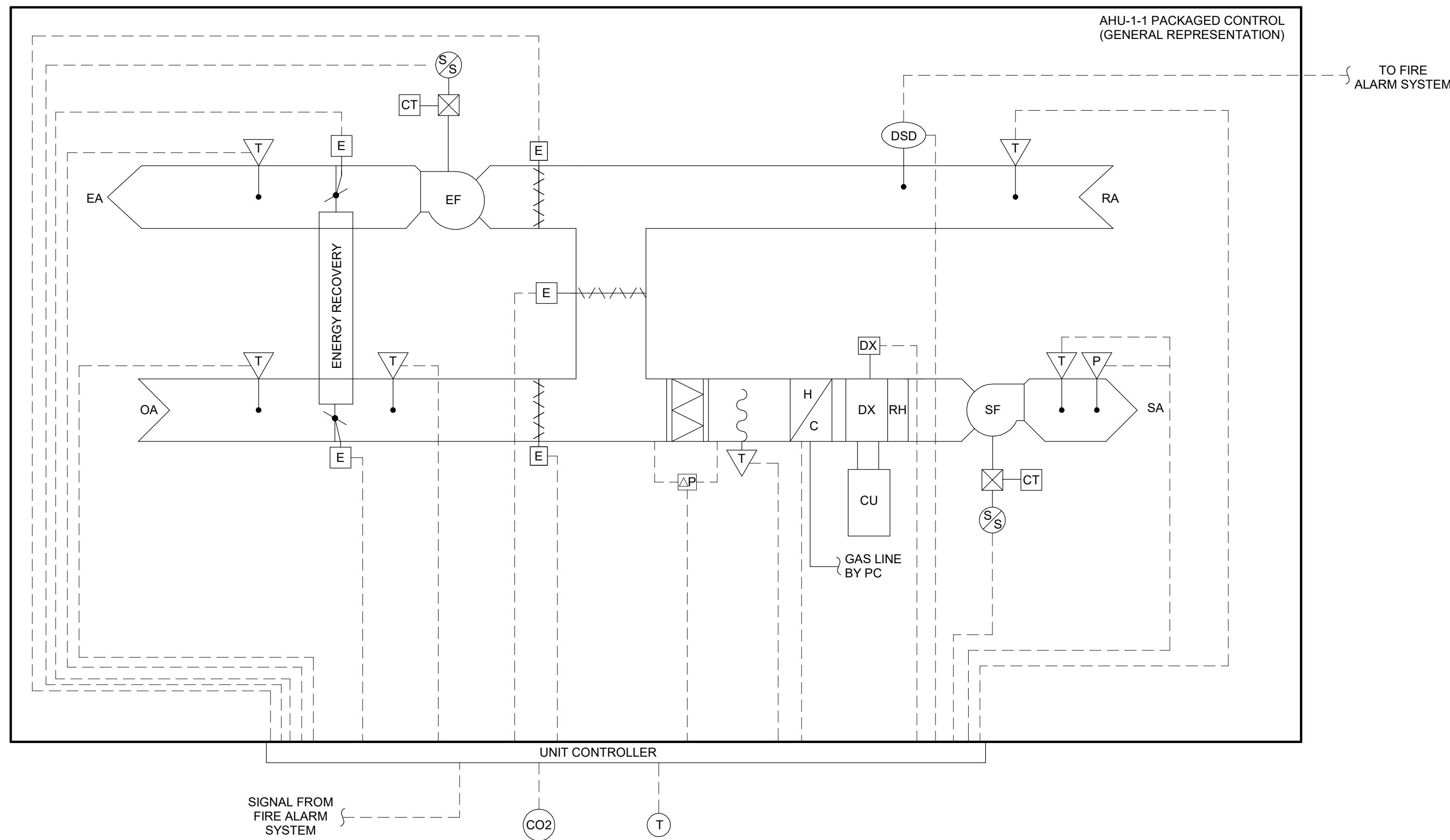
7 NTS

- VARIBLE REFRIGERANT FLOW UNIT CONTROL SEQUENCE:**
- A. THE ZONE TEMPERATURE SETPOINTS SHALL BE DEFINED AND SCHEDULED BY THE ZONE THERMOSTAT. THE THERMOSTAT TO BE 7-DAY PROGRAMMABLE. ALL SETPOINTS SHALL BE BASED OFF OF TIME OF DAY SCHEDULE.
 - B. VRF OUTDOOR UNIT SHALL RUN WHEN ANY SINGLE SPACE TEMPERATURE SENSOR CALLS FOR HEATING OR COOLING.
 - C. OCCUPIED COOLING MODE:
 - 1. A ZONE THERMOSTAT SIGNALS AN INDOOR UNIT TO TURN ON WHEN THE INDOOR TEMPERATURE RISES ABOVE THE SET POINT TEMPERATURE AND KEEPS THAT INDOOR UNIT OPERATING UNTIL THE INDOOR TEMPERATURE FALLS BELOW THE SET POINT TEMPERATURE. WHEN THE INDOOR UNIT IS TURNED ON, THE INDOOR UNIT CONTROLLER TURNS ON THE INDOOR FAN TO MEET THE COOLING LOAD AND SIGNALS THE AIR SOURCE OUTDOOR UNIT TO GO INTO COOLING MODE. THE AIR SOURCE OUTDOOR UNIT CONTROLLER TURNS ON THE VARIABLE-SPEED INVERTER COMPRESSOR (INVERTER), WHICH SPEEDS UP OR SLOWS DOWN TO MATCH THE INDOOR COOLING LOAD.
 - 2. THE INDOOR-UNIT ELECTRONIC EXPANSION VALVE (EEV) MEETS COOLING DEMAND BY ADJUSTING THE REFRIGERANT FLOW TO MAINTAIN SUPERHEAT. AN EEV LOCATED IN THE AIR SOURCE OUTDOOR UNIT STAYS FULLY OPEN AND THE FOUR-WAY REVERSING VALVE REMAINS OFF.
 - D. OCCUPIED HEATING MODE:
 - 1. A ZONE THERMOSTAT SIGNALS AN INDOOR UNIT TO TURN ON WHEN THE INDOOR TEMPERATURE FALLS BELOW THE SET POINT AND KEEPS THAT INDOOR UNIT OPERATING UNTIL THE INDOOR TEMPERATURE RISES ABOVE THE SET POINT TEMPERATURE. WHEN AN INDOOR UNIT IS TURNED ON, ITS INDOOR UNIT CONTROLLER SIGNALS THE AIR SOURCE OUTDOOR UNIT TO TURN ON HEATING MODE. THE FOUR-WAY REVERSING VALVE SWITCHES TO HEATING MODE. THE AIR SOURCE OUTDOOR UNIT CONTROLLER TURNS ON THE INVERTER, WHICH SPEEDS UP OR SLOWS DOWN TO MATCH THE INDOOR HEATING LOAD. ONCE THE INDOOR-UNIT COIL TEMPERATURE REACHES 76°F, THE INDOOR UNIT FAN TURNS ON TO MEET THE HEATING LOAD.
 - 2. THE INDOOR UNIT EEV MEETS HEATING DEMAND BY ADJUSTING REFRIGERANT FLOW THROUGH THE COIL TO MAINTAIN SUB COOLING. COMPRESSOR SPEEDS ARE ADJUSTED TO MEET HEATING DEMAND. THE AIR SOURCE OUTDOOR UNIT EEV OPENS AS NEEDED TO MAINTAIN SUB COOLING. THE AIR SOURCE UNIT CONTROLLER RUNS VARIABLE-SPEED OUTDOOR FANS TO MAINTAIN A LOW PRESSURE TARGET.
 - E. DEFROST CYCLE:
 - 1. UNIT TO COME WITH INTEGRAL LOGIC WITHIN OUTDOOR UNIT CONTROLLER FOR DEFROST CYCLE.
 - F. ALARMS SHALL BE PROVIDED AS FOLLOWS:
 - 1. INDOOR UNIT MALFUNCTION
 - 2. OUTDOOR UNIT COMPRESSOR FAILURE
 - 3. THERMOSTAT COMMUNICATION ERROR
 - 4. INDOOR UNIT FAN FAILURE
 - 5. FILTER CLOGGED



SEQUENCE OF OPERATIONS: RTU-1-2

- A. RUN CONDITIONS: THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:
1. OCCUPIED:
 - a. DURING OCCUPIED PERIODS, THE SUPPLY FAN SHALL RUN CONTINUOUSLY AND THE MIXED AIR DAMPERS SHALL OPEN TO MAINTAIN MINIMUM VENTILATION REQUIREMENTS. THE DX COOLING AND THE GAS HEAT SHALL CONTROL TO MAINTAIN THE ACTIVE DISCHARGE AIR TEMPERATURE SETPOINT. IF ECONOMIZING IS ENABLED, THE OUTDOOR AIR OR MIXED AIR DAMPERS SHALL MODULATE TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT AND THE RELIEF AIR DAMPER SHALL TRACK THE MIXED AIR DAMPERS. THE DISCHARGE AIR TEMPERATURE SETPOINT SHALL BE DYNAMICALLY RESET BASED ON THE DEVIATION OF ACTUAL SPACE TEMPERATURE FROM THE ACTIVE SPACE TEMPERATURE SETPOINT. IF THE DISCHARGE AIR TEMPERATURE SENSOR FAILS, THE DX COOLING AND THE GAS HEAT SHALL CONTROL TO MAINTAIN THE ACTIVE SPACE TEMPERATURE SETPOINT AND AN ALARM SHALL BE SIGNALLED TO THE SYSTEM MANAGER. IF THE DISCHARGE AIR TEMPERATURE SENSOR AND THE SPACE TEMPERATURE SENSOR FAIL, THE DX COOLING SHALL BE DISABLED, THE GAS HEAT SHALL BE DISABLED, AND AN ALARM SHALL BE SIGNALLED TO THE SYSTEM MANAGER.
 2. UNOCCUPIED:
 - a. WHEN THE SPACE TEMPERATURE IS BELOW THE UNOCCUPIED HEATING SETPOINT OF 60.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL BE COMMANDED ON, THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED AND THE GAS HEAT SHALL BE ENABLED. WHEN THE SPACE TEMPERATURE RISES ABOVE THE UNOCCUPIED HEATING SETPOINT OF 60.0 DEG. F (ADJ.) PLUS THE UNOCCUPIED DIFFERENTIAL OF 4.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL STOP AND THE GAS HEAT SHALL BE DISABLED. WHEN THE SPACE TEMPERATURE IS ABOVE THE UNOCCUPIED COOLING SETPOINT OF 85.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL BE COMMANDED ON, THE OUTSIDE AIR DAMPER SHALL OPEN IF ECONOMIZING IS ENABLED AND REMAIN CLOSED IF ECONOMIZING IS DISABLED AND THE DX COOLING SHALL BE ENABLED. WHEN THE SPACE TEMPERATURE FALLS BELOW THE UNOCCUPIED COOLING SETPOINT OF 85.0 DEG. F MINUS THE UNOCCUPIED DIFFERENTIAL OF 4.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL STOP, THE DX COOLING SHALL BE DISABLED AND THE OUTSIDE AIR DAMPER SHALL CLOSE.
- B. OPTIMAL START:
1. THE UNIT CONTROLLER SHALL MONITOR THE SCHEDULED OCCUPIED TIME. OCCUPIED SPACE SETPOINTS AND SPACE TEMPERATURE TO CALCULATE WHEN THE OPTIMAL START OCCURS.
- C. WARM-UP MODE:
1. DURING OPTIMAL START, IF THE SPACE TEMPERATURE IS BELOW THE OCCUPIED HEATING SETPOINT A MORNING WARM-UP MODE SHALL BE ACTIVATED. WHEN MORNING WARM-UP IS INITIATED THE UNIT SHALL ENABLE THE HEATING AND FAN(S). THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED. WHEN THE SPACE TEMPERATURE REACHES THE OCCUPIED HEATING SETPOINT (ADJ.), THE UNIT SHALL TRANSITION TO THE OCCUPIED MODE.
- D. PRE-COOL MODE:
1. DURING OPTIMAL START, IF THE SPACE TEMPERATURE IS ABOVE THE OCCUPIED COOLING SETPOINT, PRE-COOL MODE SHALL BE ACTIVATED. WHEN PRE-COOL IS INITIATED THE UNIT SHALL ENABLE THE FAN AND COOLING OR ECONOMIZER. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED. UNLESS ECONOMIZING, WHEN THE SPACE TEMPERATURE REACHES THE OCCUPIED COOLING SETPOINT (ADJ.), THE UNIT SHALL TRANSITION TO THE OCCUPIED MODE.
- E. OPTIMAL STOP:
1. THE UNIT CONTROLLER SHALL MONITOR THE SCHEDULED UNOCCUPIED TIME. OCCUPIED SETPOINTS AND SPACE TEMPERATURE TO CALCULATE WHEN THE OPTIMAL STOP OCCURS. WHEN THE OPTIMAL STOP MODE IS ACTIVE THE UNIT CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE TO THE SPACE TEMPERATURE OFFSET SETPOINT. OUTSIDE AIR DAMPER SHALL REMAIN ENABLED TO PROVIDE MINIMUM VENTILATION.
- F. SUPPLY FAN:
1. THE UNIT CONTROLLER SHALL VARY THE SUPPLY FAN SPEED TO OPTIMIZE MINIMUM FAN SPEED IN ALL COOLING AND HEATING MODES.
- G. OCCUPANCY OVERRIDE:
1. THE UNIT CONTROLLER SHALL MONITOR THE STATUS OF THE SPACE TEMPERATURE SENSOR. WHEN AN OCCUPIED OVERRIDE REQUEST IS RECEIVED FROM A SPACE SENSOR, THE UNIT SHALL TRANSITION FROM ITS CURRENT OCCUPANCY MODE TO OCCUPIED BYPASS MODE AND THE UNIT SHALL MAINTAIN THE SPACE TEMPERATURE TO THE OCCUPIED SETPOINTS (ADJ.). THE OVERRIDE SHALL LAST FOR A MAXIMUM OF 2 HOURS (ADJ.). THE OCCUPANTS SHALL BE ABLE TO CANCEL THE OVERRIDE FROM THE SPACE SENSOR AT ANY TIME.
- H. HEAT/COOL MODE:
1. WHEN THE SPACE TEMPERATURE RISES ABOVE THE OCCUPIED COOLING SETPOINT THE MODE SHALL TRANSITION TO COOLING. WHEN THE SPACE TEMPERATURE FALLS BELOW THE OCCUPIED HEATING SETPOINT THE MODE SHALL TRANSITION TO HEATING. IF THE SPACE TEMPERATURE SENSOR FAILS THE MODE SHALL REMAIN IN ITS LAST STATE AND AN ALARM SHALL BE SIGNALLED TO THE SYSTEM MANAGER. IF THE LOCAL AND COMMUNICATED SETPOINTS FAIL THE CONTROLLER SHALL DISABLE THE SUPPLY FAN AND AN ALARM SHALL BE SIGNALLED TO THE SYSTEM MANAGER.
- I. DEHUMIDIFICATION:
1. THE UNIT SHALL BE IN DEHUMIDIFICATION MODE IF THE SPACE HUMIDITY IS ABOVE THE DEHUMIDIFICATION SETPOINT (60% RH ADJ.). IN THE DEHUMIDIFICATION MODE, THE SUPPLY AIR FAN SHALL BE ENABLED, THE OUTSIDE AIR DAMPER SHALL BE COMMANDED TO MINIMUM POSITION, AND THE UNIT CONTROLLER SHALL ENERGIZE MECHANICAL COOLING AND THE REHEAT SOLENOID.
 2. DURING DEHUMIDIFICATION MODE, THE ON-BOARD REFRIGERANT SYSTEM MODULE (RSM) SHALL CONTROL THE COMPRESSORS AND THE CONDENSERS. THE RSM WILL CONTROL ITS COMPRESSORS TO ACHIEVE THE MOST EFFICIENT DEHUMIDIFICATION CONTROL.
- J. ECONOMIZER:
1. THE SUPPLY AIR SENSOR SHALL MEASURE THE DRY BULB TEMPERATURE OF THE AIR LEAVING THE EVAPORATOR COIL WHILE ECONOMIZING. WHEN ECONOMIZING IS ENABLED AND THE UNIT IS OPERATING IN THE COOLING MODE, THE ECONOMIZER DAMPER SHALL BE MODULATED BETWEEN ITS MINIMUM POSITION AND 100% TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT. THE ECONOMIZER DAMPER SHALL MODULATE TOWARD MINIMUM POSITION IN THE EVENT THE DISCHARGE AIR TEMPERATURE FALLS BELOW THE DISCHARGE LOW LIMIT TEMPERATURE SETPOINT (50°F ADJ.). COMPRESSORS SHALL BE DELAYED FROM OPERATING UNTIL THE ECONOMIZER HAS OPENED TO 100% FOR 5 MINUTES.
 - a. THE ECONOMIZER SHALL BE ENABLED WHENEVER:
 1. OUTSIDE AIR TEMPERATURE IS LESS THAN 65°F (ADJ.)
 2. OA ENTHALPY IS LESS THAN RA ENTHALPY - 2.0 BTULB.
 - b. THE ECONOMIZER SHALL CLOSE WHENEVER:
 1. OA ENTHALPY IS GREATER THAN RA ENTHALPY
 2. OUTSIDE AIR TEMPERATURE IS EQUAL TO OR GREATER THAN 65°F (ADJ.)
 3. ON LOSS OF SUPPLY FAN
 2. THE OUTSIDE AND EXHAUST AIR DAMPERS SHALL CLOSE AND THE RETURN AIR DAMPER SHALL OPEN WHEN THE UNIT IS OFF.
- K. MIXED AIR TEMP:
1. THE UNIT CONTROLLER SHALL MONITOR THE MIXED AIR TEMPERATURE AND USE AS REQUIRED FOR ECONOMIZER CONTROL.
- L. RETURN AIR TEMP:
1. THE UNIT CONTROLLER SHALL MONITOR THE RETURN AIR TEMPERATURE AND USE AS REQUIRED FOR ECONOMIZER CONTROL.
- M. SUPPLY AIR TEMP:
1. THE UNIT CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE.
- N. VENTILATION CONTROL:
1. WHEN THE SPACE CO2 LEVEL IS GREATER THAN OR EQUAL TO THE DESIGN CO2 SETPOINT (600 PPM ADJ.), THE OUTDOOR AIR DAMPERS SHALL MODULATE USING A PID CONTROL ALGORITHM. WHEN THE SPACE CO2 LEVEL IS LESS THAN OR EQUAL TO THE CO2 SETPOINT, THE OUTDOOR AIR DAMPER SHALL CLOSE TO THE DCV MINIMUM OUTDOOR AIR DAMPER SETPOINT. IF THERE IS A CALL FOR ECONOMIZER COOLING, THE DAMPER SHALL BE OPENED FURTHER TO SATISFY THE COOLING REQUEST.
- O. SUPPLY DUCT STATIC PRESSURE CONTROL:
1. DURING OCCUPIED MODE THE UNIT CONTROLLER SHALL MODULATE THE OUTPUT TO THE VARIABLE SPEED DRIVE AS REQUIRED TO MAINTAIN THE DUCT STATIC PRESSURE SETPOINT AS DETERMINED BY THE TAB AGENT TO MEET THE REQUIREMENTS OF THE TERMINAL UNIT AIRFLOWS. IF THE DUCT STATIC PRESSURE FALLS 0.2 INCHES OF W.C. (ADJ.) BELOW THIS SETPOINT THE UNIT CONTROLLER SHALL INCREASE THE OUTPUT TO THE VARIABLE SPEED DRIVE TO MAINTAIN SETPOINT. IF THE DUCT STATIC PRESSURE RISES 0.2 INCHES OF W.C. (ADJ.) ABOVE THIS SETPOINT THE UNIT CONTROLLER SHALL DECREASE THE OUTPUT TO THE VARIABLE SPEED DRIVE TO MAINTAIN SETPOINT.
- P. FILTER STATUS:
1. A DIFFERENTIAL PRESSURE SWITCH SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER(S) WHEN THE FAN IS RUNNING. IF THE SWITCH CLOSURES DURING NORMAL OPERATION A DIRTY FILTER ALARM SHALL BE SIGNALLED TO THE SYSTEM MANAGER.
- Q. RETURN AIR SMOKE DETECTION:
1. THE UNIT SHALL SHUT DOWN AND GENERATE A SIGNAL TO THE FIRE ALARM SYSTEM UPON RECEIVING A DETECTION OF SMOKE IN THE RETURN AIR DUCT.
 - a. THE UNIT SHALL SHUT DOWN IN RESPONSE TO A SIGNAL FROM THE RETURN AIR SMOKE DETECTOR INDICATING THE PRESENCE OF SMOKE. THE SMOKE DETECTOR SHALL BE INTERLOCKED TO THE UNIT THROUGH THE DRY CONTACTS OF THE SMOKE DETECTOR. A MANUAL RESET OF THE SMOKE DETECTOR SHALL BE REQUIRED TO RESTART THE UNIT.
- R. FIRE ALARM SHUTDOWN:
1. THE UNIT SHALL SHUT DOWN AND UPON RECEIVING A SIGNAL FROM THE FIRE ALARM SYSTEM.



SEQUENCE OF OPERATIONS: AHU-1-1

- A. RUN CONDITIONS: THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:
1. OCCUPIED:
 - a. DURING OCCUPIED PERIODS, THE SUPPLY FAN SHALL RUN CONTINUOUSLY AND THE MIXED AIR DAMPERS SHALL OPEN TO MAINTAIN MINIMUM VENTILATION REQUIREMENTS. THE DX COOLING AND THE GAS HEAT SHALL CONTROL TO MAINTAIN THE ACTIVE DISCHARGE AIR TEMPERATURE SETPOINT. IF ECONOMIZING IS ENABLED, THE OUTDOOR AIR OR MIXED AIR DAMPERS SHALL MODULATE TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT AND THE RELIEF AIR DAMPER SHALL TRACK THE MIXED AIR DAMPERS. THE DISCHARGE AIR TEMPERATURE SETPOINT SHALL BE DYNAMICALLY RESET BASED ON THE DEVIATION OF ACTUAL SPACE TEMPERATURE FROM THE ACTIVE SPACE TEMPERATURE SETPOINT. IF THE DISCHARGE AIR TEMPERATURE SENSOR FAILS, THE DX COOLING AND THE GAS HEAT SHALL CONTROL TO MAINTAIN THE ACTIVE SPACE TEMPERATURE SETPOINT AND AN ALARM SHALL BE SIGNALLED TO THE SYSTEM MANAGER. IF THE DISCHARGE AIR TEMPERATURE SENSOR AND THE SPACE TEMPERATURE SENSOR FAIL, THE DX COOLING SHALL BE DISABLED, THE GAS HEAT SHALL BE DISABLED, AND AN ALARM SHALL BE SIGNALLED TO THE SYSTEM MANAGER.
 2. UNOCCUPIED:
 - a. WHEN THE SPACE TEMPERATURE IS BELOW THE UNOCCUPIED HEATING SETPOINT OF 60.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL BE COMMANDED ON, THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED AND THE GAS HEAT SHALL BE ENABLED. WHEN THE SPACE TEMPERATURE RISES ABOVE THE UNOCCUPIED HEATING SETPOINT OF 60.0 DEG. F (ADJ.) PLUS THE UNOCCUPIED DIFFERENTIAL OF 4.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL STOP AND THE GAS HEAT SHALL BE DISABLED. WHEN THE SPACE TEMPERATURE IS ABOVE THE UNOCCUPIED COOLING SETPOINT OF 85.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL BE COMMANDED ON, THE OUTSIDE AIR DAMPER SHALL OPEN IF ECONOMIZING IS ENABLED AND REMAIN CLOSED IF ECONOMIZING IS DISABLED AND THE DX COOLING SHALL BE ENABLED. WHEN THE SPACE TEMPERATURE FALLS BELOW THE UNOCCUPIED COOLING SETPOINT OF 85.0 DEG. F MINUS THE UNOCCUPIED DIFFERENTIAL OF 4.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL STOP, THE DX COOLING SHALL BE DISABLED AND THE OUTSIDE AIR DAMPER SHALL CLOSE.
- B. OPTIMAL START:
1. THE UNIT CONTROLLER SHALL MONITOR THE SCHEDULED OCCUPIED TIME. OCCUPIED SPACE SETPOINTS AND SPACE TEMPERATURE TO CALCULATE WHEN THE OPTIMAL START OCCURS.
- C. WARM-UP MODE:
1. DURING OPTIMAL START, IF THE SPACE TEMPERATURE IS BELOW THE OCCUPIED HEATING SETPOINT A MORNING WARM-UP MODE SHALL BE ACTIVATED. WHEN MORNING WARM-UP IS INITIATED THE UNIT SHALL ENABLE THE HEATING AND FAN(S). THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED. WHEN THE SPACE TEMPERATURE REACHES THE OCCUPIED HEATING SETPOINT (ADJ.), THE UNIT SHALL TRANSITION TO THE OCCUPIED MODE.
- D. PRE-COOL MODE:
1. DURING OPTIMAL START, IF THE SPACE TEMPERATURE IS ABOVE THE OCCUPIED COOLING SETPOINT, PRE-COOL MODE SHALL BE ACTIVATED. WHEN PRE-COOL IS INITIATED THE UNIT SHALL ENABLE THE FAN AND COOLING OR ECONOMIZER. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED. UNLESS ECONOMIZING, WHEN THE SPACE TEMPERATURE REACHES THE OCCUPIED COOLING SETPOINT (ADJ.), THE UNIT SHALL TRANSITION TO THE OCCUPIED MODE.
- E. OPTIMAL STOP:
1. THE UNIT CONTROLLER SHALL MONITOR THE SCHEDULED UNOCCUPIED TIME. OCCUPIED SETPOINTS AND SPACE TEMPERATURE TO CALCULATE WHEN THE OPTIMAL STOP OCCURS. WHEN THE OPTIMAL STOP MODE IS ACTIVE THE UNIT CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE TO THE SPACE TEMPERATURE OFFSET SETPOINT. OUTSIDE AIR DAMPER SHALL REMAIN ENABLED TO PROVIDE MINIMUM VENTILATION.
- F. SUPPLY FAN:
1. THE UNIT CONTROLLER SHALL VARY THE SUPPLY FAN SPEED TO OPTIMIZE MINIMUM FAN SPEED IN ALL COOLING AND HEATING MODES.
- G. OCCUPANCY OVERRIDE:
1. THE UNIT CONTROLLER SHALL MONITOR THE STATUS OF THE SPACE TEMPERATURE SENSOR. WHEN AN OCCUPIED OVERRIDE REQUEST IS RECEIVED FROM A SPACE SENSOR, THE UNIT SHALL TRANSITION FROM ITS CURRENT OCCUPANCY MODE TO OCCUPIED BYPASS MODE AND THE UNIT SHALL MAINTAIN THE SPACE TEMPERATURE TO THE OCCUPIED SETPOINTS (ADJ.). THE OVERRIDE SHALL LAST FOR A MAXIMUM OF 2 HOURS (ADJ.). THE OCCUPANTS SHALL BE ABLE TO CANCEL THE OVERRIDE FROM THE SPACE SENSOR AT ANY TIME.
- H. HEAT/COOL MODE:
1. WHEN THE SPACE TEMPERATURE RISES ABOVE THE OCCUPIED COOLING SETPOINT THE MODE SHALL TRANSITION TO COOLING. WHEN THE SPACE TEMPERATURE FALLS BELOW THE OCCUPIED HEATING SETPOINT THE MODE SHALL TRANSITION TO HEATING. IF THE SPACE TEMPERATURE SENSOR FAILS THE MODE SHALL REMAIN IN ITS LAST STATE AND AN ALARM SHALL BE SIGNALLED TO THE SYSTEM MANAGER. IF THE LOCAL AND COMMUNICATED SETPOINTS FAIL THE CONTROLLER SHALL DISABLE THE SUPPLY FAN AND AN ALARM SHALL BE SIGNALLED TO THE SYSTEM MANAGER.
- I. DEHUMIDIFICATION:
1. THE UNIT SHALL BE IN DEHUMIDIFICATION MODE IF THE SPACE HUMIDITY IS ABOVE THE DEHUMIDIFICATION SETPOINT (60% RH ADJ.). IN THE DEHUMIDIFICATION MODE, THE SUPPLY AIR FAN SHALL BE ENABLED, THE OUTSIDE AIR DAMPER SHALL BE COMMANDED TO MINIMUM POSITION, AND THE UNIT CONTROLLER SHALL ENERGIZE MECHANICAL COOLING AND THE REHEAT SOLENOID.
 2. DURING DEHUMIDIFICATION MODE, THE ON-BOARD REFRIGERANT SYSTEM MODULE (RSM) SHALL CONTROL THE COMPRESSORS AND THE CONDENSERS. THE RSM WILL CONTROL ITS COMPRESSORS TO ACHIEVE THE MOST EFFICIENT DEHUMIDIFICATION CONTROL.
- J. ECONOMIZER:
1. THE SUPPLY AIR SENSOR SHALL MEASURE THE DRY BULB TEMPERATURE OF THE AIR LEAVING THE EVAPORATOR COIL WHILE ECONOMIZING. WHEN ECONOMIZING IS ENABLED AND THE UNIT IS OPERATING IN THE COOLING MODE, THE ECONOMIZER DAMPER SHALL BE MODULATED BETWEEN ITS MINIMUM POSITION AND 100% TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT. THE ECONOMIZER DAMPER SHALL MODULATE TOWARD MINIMUM POSITION IN THE EVENT THE DISCHARGE AIR TEMPERATURE FALLS BELOW THE DISCHARGE LOW LIMIT TEMPERATURE SETPOINT (50°F ADJ.). COMPRESSORS SHALL BE DELAYED FROM OPERATING UNTIL THE ECONOMIZER HAS OPENED TO 100% FOR 5 MINUTES.
 - a. THE ECONOMIZER SHALL BE ENABLED WHENEVER:
 1. OUTSIDE AIR TEMPERATURE IS LESS THAN 65°F (ADJ.)
 2. OA ENTHALPY IS LESS THAN RA ENTHALPY - 2.0 BTULB.
 - b. THE ECONOMIZER SHALL CLOSE WHENEVER:
 1. OA ENTHALPY IS GREATER THAN RA ENTHALPY
 2. OUTSIDE AIR TEMPERATURE IS EQUAL TO OR GREATER THAN 65°F (ADJ.)
 3. ON LOSS OF SUPPLY FAN
 2. THE OUTSIDE AND EXHAUST AIR DAMPERS SHALL CLOSE AND THE RETURN AIR DAMPER SHALL OPEN WHEN THE UNIT IS OFF.
- K. MIXED AIR TEMP:
1. THE UNIT CONTROLLER SHALL MONITOR THE MIXED AIR TEMPERATURE AND USE AS REQUIRED FOR ECONOMIZER CONTROL.
- L. RETURN AIR TEMP:
1. THE UNIT CONTROLLER SHALL MONITOR THE RETURN AIR TEMPERATURE AND USE AS REQUIRED FOR ECONOMIZER CONTROL.
- M. SUPPLY AIR TEMP:
1. THE UNIT CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE.
- N. ENERGY RECOVERY WHEEL OPERATION:
1. WHEN THE OUTSIDE AIR ENTHALPY IS HIGHER THAN THE RETURN AIR ENTHALPY, THE WHEEL SHALL BE TURNED ON AND BOTH OUTSIDE AIR AND RELIEF AIR BYPASS DAMPERS SHALL BE CLOSED. WHEN THE OUTSIDE AIR ENTHALPY IS LESS THAN THE RETURN AIR ENTHALPY AND THE RETURN AIR IS COOLING (OR AIRSIDE ECONOMIZING), THE WHEEL SHALL BE TURNED OFF AND BOTH OUTSIDE AIR AND RELIEF AIR BYPASS DAMPERS SHALL BE OPEN. WHEN THE RTU IS HEATING, THE WHEEL SHALL BE TURNED ON AS THE FIRST STAGE OF HEAT. THE OUTSIDE AIR BYPASS DAMPER SHALL BE CLOSED, AND THE RELIEF AIR BYPASS DAMPER SHALL MODULATE (AS NECESSARY) TO MAINTAIN DISCHARGE AIR TEMPERATURE SETPOINT (ADJ.). IF THE OUTSIDE AIR TEMPERATURE DROPS BELOW THE FROST THRESHOLD SETPOINT (ADJ.), THE OUTSIDE AIR BYPASS DAMPER SHALL MODULATE TO MAINTAIN THE EXHAUST-SIDE LEAVING TEMPERATURE AT SETPOINT.
- O. VENTILATION CONTROL:
1. WHEN THE SPACE CO2 LEVEL IS GREATER THAN OR EQUAL TO THE DESIGN CO2 SETPOINT (600 PPM ADJ.), THE OUTDOOR AIR DAMPERS SHALL MODULATE USING A PID CONTROL ALGORITHM. WHEN THE SPACE CO2 LEVEL IS LESS THAN OR EQUAL TO THE CO2 SETPOINT, THE OUTDOOR AIR DAMPER SHALL CLOSE TO THE DCV MINIMUM OUTDOOR AIR DAMPER SETPOINT. IF THERE IS A CALL FOR ECONOMIZER COOLING, THE DAMPER SHALL BE OPENED FURTHER TO SATISFY THE COOLING REQUEST.
- P. SUPPLY DUCT STATIC PRESSURE CONTROL:
1. DURING OCCUPIED MODE THE UNIT CONTROLLER SHALL MODULATE THE OUTPUT TO THE VARIABLE SPEED DRIVE AS REQUIRED TO MAINTAIN THE DUCT STATIC PRESSURE SETPOINT AS DETERMINED BY THE TAB AGENT TO MEET THE REQUIREMENTS OF THE TERMINAL UNIT AIRFLOWS. IF THE DUCT STATIC PRESSURE FALLS 0.2 INCHES OF W.C. (ADJ.) BELOW THIS SETPOINT THE UNIT CONTROLLER SHALL INCREASE THE OUTPUT TO THE VARIABLE SPEED DRIVE TO MAINTAIN SETPOINT. IF THE DUCT STATIC PRESSURE RISES 0.2 INCHES OF W.C. (ADJ.) ABOVE THIS SETPOINT THE UNIT CONTROLLER SHALL DECREASE THE OUTPUT TO THE VARIABLE SPEED DRIVE TO MAINTAIN SETPOINT.
- Q. RELIEF AIR AND BUILDING PRESSURE CONTROL:
1. A DIFFERENTIAL PRESSURE TRANSDUCER SHALL ACTIVELY MONITOR THE DIFFERENCE IN PRESSURE BETWEEN THE BUILDING (INDOORS) AND OUTDOORS. IF THE BUILDING PRESSURE INCREASES ABOVE THE DIFFERENTIAL PRESSURE SETPOINT, THE UNIT CONTROLLER SHALL OPEN THE RELIEF AIR DAMPER, TURN ON THE RELIEF AIR FAN AND MODULATE THE RELIEF AIR FAN VARIABLE SPEED DRIVE TO CONTROL BUILDING PRESSURE TO THE DIFFERENTIAL PRESSURE SETPOINT. IF THE BUILDING PRESSURE DECREASES BELOW THE DIFFERENTIAL PRESSURE SETPOINT, THE ASSOCIATED CONTROLLER SHALL DEACTIVATE THE RELIEF AIR FAN VARIABLE SPEED DRIVE.
- R. FILTER STATUS:
1. A DIFFERENTIAL PRESSURE SWITCH SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER(S) WHEN THE FAN IS RUNNING. IF THE SWITCH CLOSURES DURING NORMAL OPERATION A DIRTY FILTER ALARM SHALL BE SIGNALLED TO THE SYSTEM MANAGER.
- S. RETURN AIR SMOKE DETECTION:
1. THE UNIT SHALL SHUT DOWN AND GENERATE A SIGNAL TO THE FIRE ALARM SYSTEM UPON RECEIVING A DETECTION OF SMOKE IN THE RETURN AIR DUCT.
 - a. THE UNIT SHALL SHUT DOWN IN RESPONSE TO A SIGNAL FROM THE RETURN AIR SMOKE DETECTOR INDICATING THE PRESENCE OF SMOKE. THE SMOKE DETECTOR SHALL BE INTERLOCKED TO THE UNIT THROUGH THE DRY CONTACTS OF THE SMOKE DETECTOR. A MANUAL RESET OF THE SMOKE DETECTOR SHALL BE REQUIRED TO RESTART THE UNIT.
- T. FIRE ALARM SHUTDOWN:
1. THE UNIT SHALL SHUT DOWN AND UPON RECEIVING A SIGNAL FROM THE FIRE ALARM SYSTEM.



LIFE Church, NY
275 Mamaroneck Ave. Mamaroneck, NY 10543
03.03.21

Revisions
No. Description Date

LIFE Church, NY

Owner

275 Mamaroneck Ave.
Mamaroneck, NY 10543

Project Number

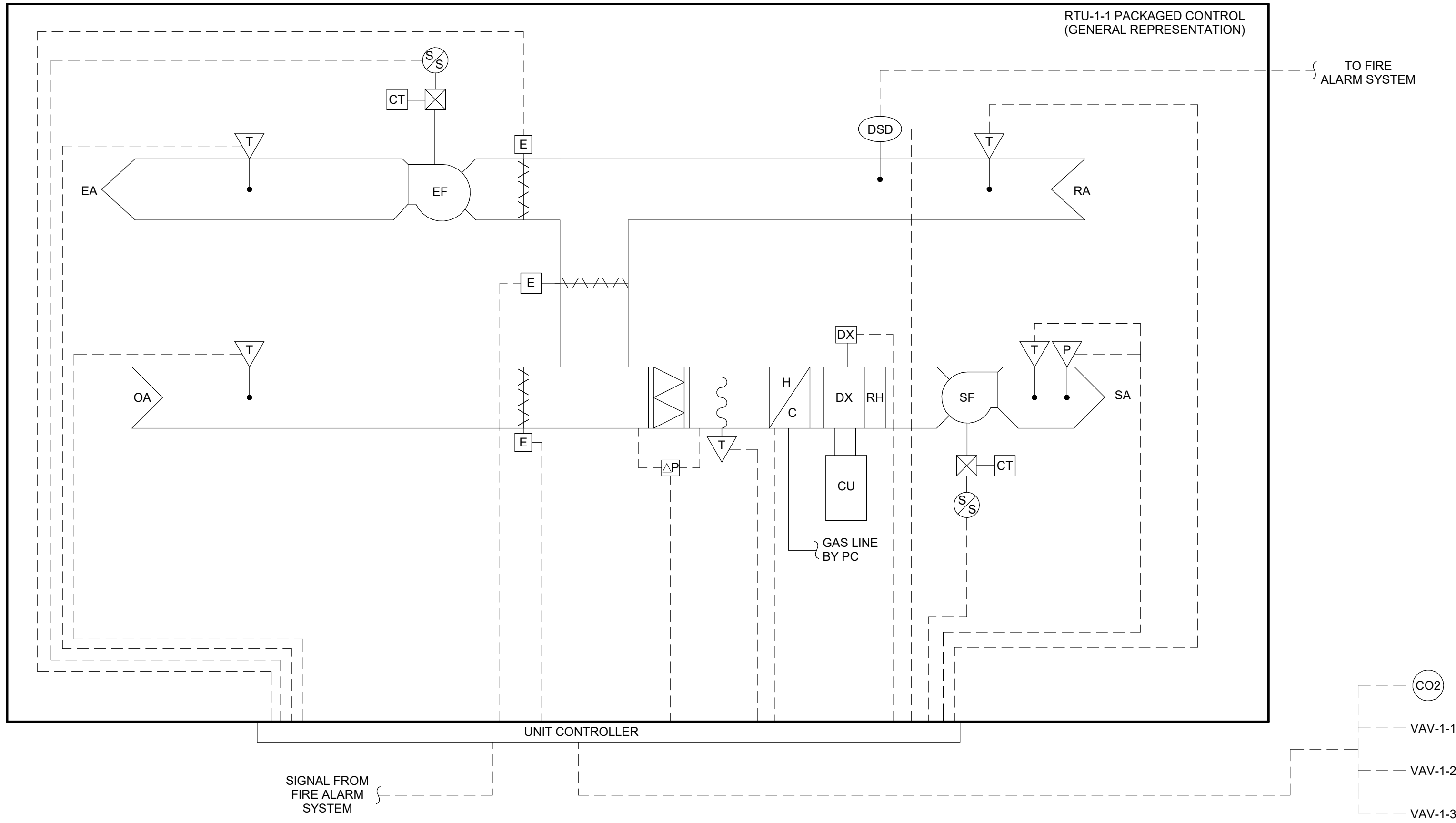
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Date

03.03.21

**MECHANICAL
CONTROLS**

M8.03



SEQUENCE OF OPERATIONS: RTU-1-1

A. RUN CONDITIONS: THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:

1. OCCUPIED MODE:

- a. DURING OCCUPIED PERIODS, THE SUPPLY FAN SHALL RUN CONTINUOUSLY AND THE MIXED AIR DAMPERS SHALL OPEN TO MAINTAIN MINIMUM VENTILATION REQUIREMENTS. THE UNIT CONTROLLER SHALL CONTROL THE SUPPLY FAN SPEED TO MAINTAIN THE CURRENT DUCT STATIC PRESSURE SETPOINT (ADJ.). THE DX COOLING AND THE GAS HEAT SHALL CONTROL TO MAINTAIN THE ACTIVE DISCHARGE AIR TEMPERATURE SETPOINT OF 55°F. IF ECONOMIZING IS ENABLED, THE OUTDOOR AIR OR MIXED AIR DAMPERS SHALL MODULATE TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT AND THE RELIEF AIR DAMPER SHALL TRACK THE MIXED AIR DAMPERS.

2. UNOCCUPIED MODE:

- a. THE UNIT SHALL RUN AS DESCRIBED IN OCCUPIED MODE EXCEPT THAT THE OUTSIDE AIR DAMPER SHALL MODULATE CLOSED.

B. THE UNIT CONTROLLER SHALL CONTAIN LOGIC FOR MORNING WARM UP AND COOL DOWN.

C. SUPPLY FAN:

1. THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN.

D. OCCUPANCY OVERRIDE:

1. THE UNIT CONTROLLER SHALL MONITOR THE STATUS OF THE VAV BOX CONTROLLERS. WHEN AN OCCUPIED OVERRIDE REQUEST IS RECEIVED, THE UNIT SHALL TRANSITION FROM ITS CURRENT OCCUPANCY MODE TO OCCUPIED BYPASS MODE AND THE UNIT SHALL MAINTAIN THE SPACE TEMPERATURE TO THE OCCUPIED SETPOINTS (ADJ.). THE OVERRIDE SHALL LAST FOR A MAXIMUM OF 2 HOURS (ADJ.). THE OCCUPANT'S SHALL BE ABLE TO CANCEL THE OVERRIDE FROM THE SPACE SENSOR AT ANY TIME.

E. HEATING :

1. THE UNIT CONTROLLER SHALL USE THE DISCHARGE AIR TEMPERATURE SENSOR AND DISCHARGE AIR TEMPERATURE SETPOINT TO DETERMINE WHEN TO INITIATE REQUESTS FOR HEATING. DISCHARGE AIR SETPOINT SHALL BE MAINTAINED BY CONTROLLING THE HEATING AS REQUIRED.
2. WHEN ALL ZONE CONTROLLERS ARE CALLING FOR HEATING, THE UNIT SHALL MAINTAIN A DISCHARGE AIR TEMPERATURE OF 65°F (ADJ.).

F. COOLING:

1. THE UNIT CONTROLLER SHALL USE THE DISCHARGE AIR TEMPERATURE SENSOR AND DISCHARGE AIR TEMPERATURE SETPOINT TO DETERMINE WHEN TO INITIATE REQUESTS FOR COOLING. DISCHARGE AIR SETPOINT SHALL BE MAINTAINED BY CONTROLLING THE COOLING AS REQUIRED.

G. DISCHARGE AIR TEMPERATURE RESET CONTROL:

1. THE DISCHARGE AIR TEMPERATURE SETPOINT, 55° F (ADJ.) SHALL BE RESET BASED ON EITHER THE OUTSIDE AIR TEMPERATURE OR SPACE AVERAGE TEMPERATURE (ADJ.). THE DISCHARGE AIR SETPOINT SHALL BE SET AT 55.0 DEG. F (ADJ.). THE DISCHARGE TEMPERATURE SENSOR SHALL PREVENT THE DISCHARGE AIR TEMPERATURE FROM FALLING BELOW THE MINIMUM DISCHARGE AIR SETPOINT OF 53°F (ADJ.).
- a. OUTDOOR AIR TEMPERATURE RESET: THE DISCHARGE AIR TEMPERATURE SETPOINT SHALL BE ADJUSTED BASED ON OUTSIDE AIR TEMPERATURE AND THE COOLING AND HEATING LOAD OF THE BUILDING.
- b. SPACE TEMPERATURE RESET: THE DISCHARGE AIR TEMPERATURE SETPOINT SHALL BE ADJUSTED BASED ON THE TEMPERATURE OF THE CRITICAL ZONE(S) (ADJ.).

H. DEHUMIDIFICATION:

1. THE UNIT SHALL BE IN DEHUMIDIFICATION MODE IF THE SPACE HUMIDITY IS ABOVE THE DEHUMIDIFICATION SETPOINT (60% RH). IN THE DEHUMIDIFICATION MODE, THE SUPPLY AIR FAN SHALL BE ENABLED, THE OUTSIDE AIR DAMPER SHALL BE COMMANDED TO MINIMUM POSITION, AND THE UNIT CONTROLLER SHALL ENERGIZE MECHANICAL COOLING AND THE REHEAT SOLENOID. UNIT SHALL USE A POLLING SYSTEM TO DETERMINE WHEN TO ENABLE DEHUMIDIFICATION MODE.
2. DURING DEHUMIDIFICATION MODE, THE ON-BOARD REFRIGERANT SYSTEM MODULE (RSM) SHALL CONTROL THE COMPRESSORS AND THE CONDENSERS. THE RSM WILL CONTROL ITS COMPRESSORS TO ACHIEVE THE MOST EFFICIENT DEHUMIDIFICATION CONTROL.

J. ECONOMIZER:

1. THE SUPPLY AIR SENSOR SHALL MEASURE THE DRY BULB TEMPERATURE OF THE AIR LEAVING THE EVAPORATOR COIL WHILE ECONOMIZING. WHEN ECONOMIZING IS ENABLED AND THE UNIT IS OPERATING IN THE COOLING MODE, THE ECONOMIZER DAMPER SHALL BE MODULATED BETWEEN ITS MINIMUM POSITION AND 100% TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT. THE ECONOMIZER DAMPER SHALL MODULATE TOWARD MINIMUM POSITION IN THE EVENT THE DISCHARGE AIR TEMPERATURE FALLS BELOW THE DISCHARGE LOW LIMIT TEMPERATURE SETPOINT (50°F ADJ.). COMPRESSORS SHALL BE DELAYED FROM OPERATING UNTIL THE ECONOMIZER HAS OPENED TO 100% FOR 5 MINUTES.

a. THE ECONOMIZER SHALL BE ENABLED WHENEVER:

1. OUTSIDE AIR TEMPERATURE IS LESS THAN 65°F (ADJ.)

2. OA ENTHALPY IS LESS THAN RA ENTHALPY - 2.0 BTULB.

b. THE ECONOMIZER SHALL CLOSE WHENEVER:

1. OA ENTHALPY IS GREATER THAN RA ENTHALPY

2. OUTSIDE AIR TEMPERATURE IS EQUAL TO OR GREATER THAN 65°F (ADJ.)

3. ON LOSS OF SUPPLY FAN

2. THE OUTSIDE AND EXHAUST AIR DAMPERS SHALL CLOSE AND THE RETURN AIR DAMPER SHALL OPEN WHEN THE UNIT IS OFF.

K. MIXED AIR TEMP:

1. THE UNIT CONTROLLER SHALL MONITOR THE MIXED AIR TEMPERATURE AND USE AS REQUIRED FOR ECONOMIZER CONTROL.

L. RETURN AIR TEMP:

1. THE UNIT CONTROLLER SHALL MONITOR THE RETURN AIR TEMPERATURE AND USE AS REQUIRED FOR ECONOMIZER CONTROL.

M. SUPPLY AIR TEMP:

1. THE UNIT CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE.

N. VENTILATION CONTROL:

1. WHEN THE CO2 LEVEL IS GREATER THAN OR EQUAL TO THE DESIGN CO2 SETPOINT (800 PPM ADJ.), THE OUTDOOR AIR DAMPERS SHALL MODULATE USING A PID CONTROL ALGORITHM. WHEN THE CO2 LEVEL IS LESS THAN OR EQUAL TO THE CO2 SETPOINT, THE OUTDOOR AIR DAMPER SHALL CLOSE TO THE DCV MINIMUM OUTDOOR AIR DAMPER SETPOINT. IF THERE IS A CALL FOR ECONOMIZER COOLING, THE DAMPER SHALL BE OPENED FURTHER TO SATISFY THE COOLING REQUEST.

O. SUPPLY DUCT STATIC PRESSURE CONTROL:

1. DURING THE OCCUPIED MODE THE UNIT CONTROLLER SHALL MODULATE THE OUTPUT TO THE VARIABLE SPEED DRIVE AS REQUIRED TO MAINTAIN THE DUCT STATIC PRESSURE SETPOINT AS DETERMINED BY THE TAB AGENT TO MEET THE REQUIREMENTS OF THE TERMINAL UNIT AIRFLOWS. IF THE DUCT STATIC PRESSURE FALLS 0.2 INCHES OF W.C. (ADJ.) BELOW THIS SETPOINT THE UNIT CONTROLLER SHALL INCREASE THE OUTPUT TO THE VARIABLE SPEED DRIVE TO MAINTAIN SETPOINT. IF THE DUCT STATIC PRESSURE RISES 0.2 INCHES OF W.C. (ADJ.) ABOVE THIS SETPOINT THE UNIT CONTROLLER SHALL DECREASE THE OUTPUT TO THE VARIABLE SPEED DRIVE TO MAINTAIN SETPOINT.

P. FILTER STATUS:

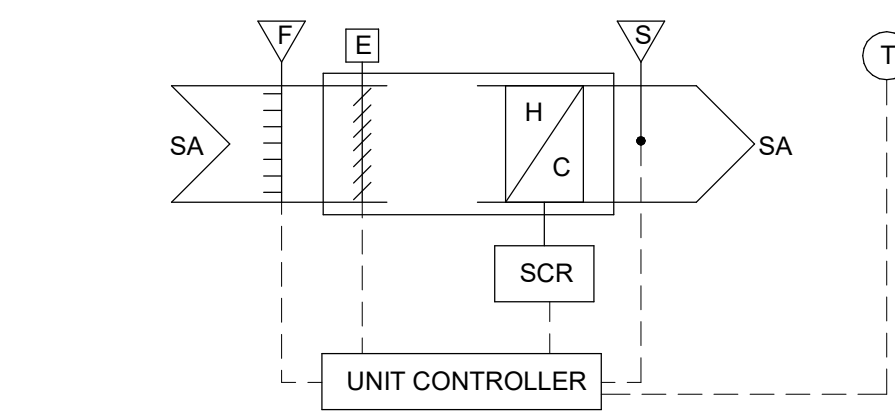
1. A DIFFERENTIAL PRESSURE SWITCH SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER(S) WHEN THE FAN IS RUNNING. IF THE SWITCH CLOSURES DURING NORMAL OPERATION A DIRTY FILTER ALARM SHALL BE SIGNALLED TO THE SYSTEM MANAGER.

Q. RETURN AIR SMOKE DETECTION:

1. THE UNIT SHALL SHUT DOWN AND GENERATE A SIGNAL TO THE FIRE ALARM SYSTEM UPON RECEIVING A DETECTION OF SMOKE IN THE RETURN AIR DUCT.
- a. THE UNIT SHALL SHUT DOWN IN RESPONSE TO A SIGNAL FROM THE RETURN AIR SMOKE DETECTOR INDICATING THE PRESENCE OF SMOKE. THE SMOKE DETECTOR SHALL BE INTERLOCKED TO THE UNIT THROUGH THE DRY CONTACTS OF THE SMOKE DETECTOR. A MANUAL RESET OF THE SMOKE DETECTOR SHALL BE REQUIRED TO RESTART THE UNIT.

R. FIRE ALARM SHUTDOWN:

1. THE UNIT SHALL SHUT DOWN AND UPON RECEIVING A SIGNAL FROM THE FIRE ALARM SYSTEM.



CONTROL SEQUENCE FOR VAV W/ ELECTRIC REHEAT:

A. RUN CONDITIONS - CONTINUOUS: VAV TERMINALS SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:

1. OCCUPIED MODE: WHEN THE UNIT IS IN THE OCCUPIED MODE THE VAV SHALL MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE OCCUPIED HEATING (70°F ADJ.) OR COOLING (75°F ADJ.) SETPOINT. APPLICABLE VENTILATION AND AIRFLOW SETPOINTS SHALL BE ENFORCED. THE OCCUPIED MODE SHALL BE THE DEFAULT MODE OF THE VAV.
2. UNOCCUPIED MODE: NORMAL OPERATING MODE FOR UNOCCUPIED SPACES OR NIGHTTIME OPERATION. WHEN THE UNIT IS IN UNOCCUPIED MODE THE VAV CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE STORED UNOCCUPIED HEATING (65°F ADJ.) OR COOLING (85°F ADJ.) SETPOINT. WHEN THE SPACE TEMPERATURE EXCEEDS THE ACTIVE UNOCCUPIED SETPOINT THE VAV SHALL MODULATE TO THE SCHEDULED MINIMUM POSITION.

B. HEAT/COOL SETPOINT: THE SPACE TEMPERATURE SETPOINT SHALL BE DETERMINED BY A LOCAL COMMUNICATED VALUE FROM THE ZONE THERMOSTAT. THE VAV SHALL USE LOCALLY STORED DEFAULT SETPOINTS WHEN NEITHER A LOCAL SETPOINT NOR COMMUNICATED SETPOINT IS PRESENT. IF BOTH A LOCAL SETPOINT AND COMMUNICATED SETPOINT EXIST, THE VAV SHALL USE THE COMMUNICATED VALUE.

C. ZONE UNOCCUPIED OVERRIDE: USED TO TEMPORARILY PLACE THE UNIT INTO THE OCCUPIED OPERATION. OCCUPANTS SHALL BE ABLE TO OVERRIDE THE UNOCCUPIED MODE FROM THE SPACE SENSOR. THE OVERRIDE SHALL LAST FOR A MAXIMUM OF 2 HOURS (ADJ.). THE OCCUPANTS SHALL BE ABLE TO CANCEL THE OVERRIDE FROM THE SPACE SENSOR AT ANY TIME. DURING THE OVERRIDE THE UNIT SHALL OPERATE IN OCCUPIED MODE.

D. COOLING MODE: THE CONTROLLER SHALL MODULATE THE VAV BETWEEN ITS MAXIMUM COOLING AIRFLOW AND ITS MINIMUM AIRFLOW TO MAINTAIN SPACE SETPOINT.

E. REHEAT COIL: THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND MODULATE THE REHEATING COIL TO MAINTAIN ITS HEATING SETPOINT.

F. REHEAT HIGH DISCHARGE AIR TEMPERATURE LIMIT: THE CONTROLLER SHALL MEASURE THE DISCHARGE AIR TEMPERATURE AND LIMIT REHEATING IF THE DISCHARGE AIR TEMPERATURE IS MORE THAN 25°F (ADJ.) ABOVE THE ZONE TEMPERATURE.

G. ELECTRIC SILICON CONTROLLED RECTIFIER REHEAT (SCR): IF THE SPACE TEMPERATURE IS AT THE HEATING SETPOINT, THE ELECTRIC HEATER SHALL MODULATE AS REQUIRED TO MAINTAIN SPACE TEMPERATURE AT ITS HEATING SETPOINT WHILE THE VAV OPERATES AT ITS HEATING AIRFLOW SETPOINT. UNIT SHALL MAINTAIN A NEUTRAL DISCHARGE AIR TEMPERATURE AS TO NOT EFFECT SPACE TEMPERATURE. UPON CALL FOR HEATING FROM THE SPACE, THE UNIT SHALL MODULATE THE HEATER AS DESCRIBED IN 'E' ABOVE.

2 VAV - ELECTRIC REHEAT CONTROL SEQUENCE
NTS

1 RTU-1-1 CONTROL SEQUENCE
NTS

GENERAL REMOVAL NOTES:

(APPLY TO ALL DRAWINGS)

A. DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL EQUIPMENT SHOWN TO BE REMOVED, OR REQUIRED TO BE REMOVED AS A RESULT OF CEILING, PARTITION OR WALL DEMOLITION WORK. COORDINATE REQUIREMENT WITH GENERAL CONTRACTOR. DISCONNECT AND REMOVE ALL EXISTING LIGHTING FIXTURES AND WIRING DEVICES INDICATED TO BE REMOVED OR REQUIRED TO BE REMOVED, AND ALL ASSOCIATED BRANCH CIRCUIT AND SPECIAL SYSTEMS WIRING AND RACEWAYS. WHERE EXISTING DEVICES ARE NOT BEING REUSED, THEY AND THEIR ASSOCIATED WIRING SHALL BE COMPLETELY REMOVED, DISCONNECT AND REMOVE ALL EMPTY AND ABANDONED RACEWAYS. CUT FLUSH WITH FLOOR OR WALL WHERE APPLICABLE AND PLUG CONDUIT WATERIGHT.

B. COORDINATE ALL REMOVAL WORK WITH OTHER TRADES.

C. CUTTING AND PATCHING OF EXISTING BUILDING FINISHES AND ELEMENTS TO FACILITATE ELECTRICAL REMOVAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

DEFINITIONS:

(APPLY TO ALL DRAWINGS)

A. INDICATE: THE TERM "INDICATE" REFERS TO GRAPHIC REPRESENTATIONS, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS, WHERE SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED. IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

B. DESCRIBED: TERMS SUCH AS "DIRECTED", "REQUESTED", "AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

C. APPROVE: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

D. FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

E. INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

F. PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL COMPLETE AND READY FOR THE INTENDED USE."

G. INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

H. ELECTRONIC SYSTEMS: THE TERM "ELECTRONIC SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS." THESE SYSTEMS INCLUDE BUT NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC..

GENERAL NOTES:

(APPLY TO ALL DRAWINGS)

A. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED N.E.C./NFPA 70 CODE.

B. THE CONTRACTOR SHALL PERFORM HIS WORK BY COORDINATING WITH THE FACILITY REPRESENTATIVE REGARDING SUCH THINGS AS NOISE, WORK AREA LIMITATIONS, ALLOWABLE WORKING HOURS, UTILITY INTERRUPTIONS, ETC.

C. ALL EXISTING SYSTEMS THAT PASS THROUGH OR ORIGINATE IN THE RENOVATED SPACE SHALL BE MAINTAINED, REROUTED, RELOCATED, ETC. SUCH THAT THE FACILITY DOES NOT EXPERIENCE LOSS OF ANY SYSTEMS AND/OR UTILITIES. WORK FOR SUCH ITEMS MUST BE COORDINATED WITH THE FACILITY REPRESENTATIVE FOR TEMPORARY OPERATIONS AND/OR INTERRUPTION.

D. THE CONTRACTOR SHALL INSTALL TEMPORARY FACILITIES/PRECAUTIONS TO GUARD AGAINST WORK THAT IS AN INFECTION CONTROL HAZARD OR NUISANCE (SUCH AS NOISE, DUST, OPERATIONS INTERRUPTION, ETC.). THE CONTRACTOR SHALL COMPLY WITH FACILITY REPRESENTATIVES FOR THE COORDINATION, LOCATION, AND QUALITY OF THESE TEMPORARY PROVISIONS.

E. ALL WORK AREAS SHALL BE KEPT CLEAN AND ORDERLY AT ALL TIMES. OPEN-ENDED ITEMS SUCH AS CONDUITS SHALL ALWAYS BE COVERED AND PROTECTED TO PROHIBIT ACCUMULATION OF CONSTRUCTION DUST/DEBRIS.

F. CONTRACTOR SHALL COORDINATE ALL THIRD PARTY SYSTEM INSPECTIONS, TESTING, AND CERTIFICATIONS. THE CONTRACTOR SHALL PROVIDE THE REQUIRED CERTIFICATIONS AND A LETTER STATING THAT SYSTEMS HAVE BEEN INSTALLED AND PERFORMED IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND MEET PROJECT/CONTRACT REQUIREMENTS.

G. CABLES CAN BE INSTALLED EXPOSED ABOVE ACCESSIBLE CEILINGS. ALL EXPOSED CABLES ARE TO BE ANCHORED TO WALL OR ROOF STRUCTURE IN BRIDLE RINGS AT MINIMUM 3'-0" O.C. OR IN CABLE TRAY.

H. CONDUIT RUNS ARE SCHEMATIC ONLY. ALL CONDUIT RUNS SHOULD TAKE THE SHORTEST MOST DIRECT ROUTE POSSIBLE. CONDUIT RUNS MAY HAVE A MAXIMUM OF (3) 90° BENDS. IF ADDITIONAL BENDS ARE REQUIRED, PROVIDE PULLBOX.

I. CUT AND PATCH WALLS AND CEILINGS AS REQUIRED TO INSTALL NEW WORK.

J. BRANCH CIRCUITS MAY BE TYPE MC CABLE BETWEEN HOMERUN JUNCTION BOX AND EQUIPMENT/DEVICE CONNECTION IN DRYWALL PARTITIONS AND ABOVE CEILING. HOMERUN JUNCTION BOX TO BE A MAXIMUM OF 20 FT. FROM EQUIPMENT/DEVICE.

K. ALL POWER/DATA/SYSTEMS SHALL BE ROUTED THROUGH CORRIDOR IN A NEAT AND WORKLIKE MANNER, WHILE ENTERING THE ROOM AT A COMMON LOCATION. PROVIDE A FIRE RATED SLEEVE FOR EACH PENETRATION IN A RATED WALL, AND A TYPICAL SLEEVE FOR ALL NON-RATED PENETRATION LOCATIONS.

L. PROVIDE INSULATED GREEN GROUND WIRE IN ALL BRANCH CIRCUITS SIZED PER N.E.C. REQUIREMENTS. ALL CIRCUITS TO BE INSTALLED IN METALLIC CONDUIT SUITABLE FOR GROUNDING.

M. PROVIDE OUTLET BOX MOLDABLE PUTTY PADS ON BACK, SIDES OF ALL OUTLETS AND BACK BOXES IN COMMON WALLS TO MEET OR EXCEED COMPLIANCE WITH UL FIRE RATING OF WALL. MOLDABLE PUTTY PADS SHALL BE PROVIDED FOR DEVICE BOXES MOUNTED WITHIN 24" OF HORIZONTAL SPACINGS. BOXES EXCEEDING 16 SQUARE INCHES IN SIZE, OR THE AGGREGATE AREA OF THE BOXES EXCEEDS 100 SQUARE FEET OF THE WALL, ALSO PROVIDE MOLDABLE PUTTY PADS FOR BOXES INSTALLED BACK-TO-BACK CLOSER THAN 2'-0" IN RATED WALLS.

N. PROVIDE INDIVIDUAL TELEPHONE / DATA RACEWAY FROM EACH TELEPHONE / DATA OUTLET TO ACCESSIBLE CEILING. FIRESAFE AT RATED PENETRATIONS. CONTRACTOR SHALL TERMINATE AND TEST ALL JACKS AND CABLING.

O. BRANCH CIRCUITS SHALL BE TESTED DURING INSTALLATION FOR CONTINUITY AND IDENTIFICATION AND SHALL PASS OPERATIONAL TESTS TO DETERMINE THAT ALL CIRCUITS PERFORM THE FUNCTION FOR WHICH THEY ARE DESIGNED. FOR ALL FEEDER WIRING RATED 600 VOLTS OR LESS, PROVIDE 1,000 VOLT "MEGGER" INSULATION TEST PRIOR TO ENERGIZING FEEDERS. USE A 1,000-VOLT MOTOR DRIVEN MEGGER FOR ALL TESTS. TEST VOLTAGE SHALL BE APPLIED UNTIL READINGS REACH A CONSTANT VALUE, AND UNTIL THREE (3) EQUAL READINGS, EACH ONE (1) MINUTE APART, ARE OBTAINED. MINIMUM MEGGER READING SHALL BE 45 MEGOHMS FOR FEEDER CONDUCTORS. DOCUMENT TEST RESULTS AND SUBMIT FOR APPROVAL PRIOR TO ENERGIZING CONDUCTORS.

FIRE ALARM GENERAL NOTES:

(APPLY TO ALL DRAWINGS)

A. PROVIDE LABOR, MATERIALS, EQUIPMENT AND SERVICES REQUIRED TO PERFORM OPERATIONS REQUIRED FOR THE COMPLETE INSTALLATION OF A FULLY OPERATIONAL, ANALOG ADDRESSABLE FIRE ALARM SYSTEM AND RELATED WORK AS DESCRIBED IN THE CONTRACT DOCUMENTS.

B. ALL WIRING SHALL CONFORM TO THE NEC, AND TO NFPA-72, NATIONAL FIRE ALARM CODE. INSTALL IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

C. ALL WIRING SHALL BE COPPER AND INSTALLED IN A DEDICATED/SEGREGATED EMT CONDUIT SYSTEM.

D. PROVIDE MINIMUM #18 AWG TWISTED SHIELDED PAIR FOR ADDRESSABLE SIGNAL LINE CIRCUITS. NOTIFICATION APPLIANCE CIRCUITS SHALL BE #14 AWG MINIMUM.

E. THE COMPLETE FIRE ALARM SYSTEM SHALL BE FULLY TESTED AFTER THE WORK IS COMPLETE. TESTING SHALL INCLUDE ALL DEVICES, CONTROL PANEL, ANNUNCIATOR PANEL, OTHER PANELS, FEATURES AND FUNCTIONS. TESTING SHALL BE WITNESSED BY THE OWNER'S REPRESENTATIVE AND BE IN ACCORDANCE WITH THE NFPA, PROVIDE A TESTING REPORT TO THE AHJ AND THE ENGINEER AS A SUBMITTAL.

F. ACTIVATION OF A NEW MANUAL PULL STATION, SMOKE DETECTOR, HEAT DETECTOR OR SPRINKLER SYSTEM WATER FLOW SWITCH SHALL INITIATE THE PREDEFINED FIRE ALARM SYSTEM "ALARM" SEQUENCE:

A. DISPLAY ALARM CONDITION AT FIRE ALARM CONTROL UNIT AND REMOTE ANNUNCIATER(S).

B. ENERGIZE AUDIBLE AND VISUAL NOTIFICATION CIRCUITS WITHIN EVACUATION AREAS(S) AS DESIGNED BY PRE-ESTABLISHED CONTROL UNIT SEQUENCE OF OPERATIONS.

C. PERFORM AUXILIARY FIRE SAFETY FUNCTIONS AS DESIGNATED BY PRE-ESTABLISHED CONTROL UNIT SEQUENCE OF OPERATIONS SUCH AS ELEVATOR RECALL, DAMPER ACTIVATION, DOOR CLOSURE, AHJ SHUTDOWN, PRESSURIZATION SYSTEMS, ETC..

D. TRANSMIT ALARM CONDITION TO CENTRAL SUPERVISING STATION AND/OR LOCAL FIRE DEPARTMENT.

G. THE OPERATION OF NEW SPRINKLER TAMPER SWITCH OR DUCT SMOKE DETECTOR SHALL INITIATE THE PREDEFINED FIRE ALARM SYSTEM "SUPERVISORY" SEQUENCE:

A. DISPLAY SUPERVISORY CONDITION AT FIRE ALARM CONTROL UNIT AND REMOTE ANNUNCIATER(S).

B. TRANSMIT SUPERVISORY CONDITION TO CENTRAL / SUPERVISING STATION.

H. POWER FAILURE TO FIRE ALARM SYSTEM REMOTE POWER SUPPLIES, GROUND FAULTS, SHORT CIRCUITS AND OPEN CIRCUIT CONDITIONS SHALL INITIATE THE PREDEFINED FIRE ALARM SYSTEM "TROUBLE" SEQUENCE:

A. DISPLAY SUPERVISORY CONDITION AT FIRE ALARM CONTROL UNIT AND REMOTE ANNUNCIATER(S).

B. TRANSMIT TROUBLE CONDITION TO CENTRAL / SUPERVISING STATION.

C. OPERATION OF A NEW IN-DUCT SMOKE DETECTOR PROVIDED AT AIR HANDLING UNITS (AHU'S) SHALL SHUT DOWN THE CORRESPONDING AHU. OPERATION OF AN EXISTING OR NEW IN-DUCT DETECTOR PROVIDED FOR CONTROL OF SMOKE DAMPER SHALL CLOSE THE CORRESPONDING AHU.

I. ALL FIRE ALARM SYSTEM RACEWAY SIZES AND CIRCUITRY REQUIREMENTS SHALL BE INSTALLED WITH EQUIPMENT MANUFACTURERS WIRING DIAGRAM, SHOP DRAWINGS AND ALL APPLICABLE CODES THAT MAY APPLY.

J. DRAWINGS ARE INTENDED TO ILLUSTRATE MAJOR EQUIPMENT AND THE INTENDED INTERCONNECTIONS. REFER TO FLOOR PLANS FOR EXACT QUANTITIES AND LOCATION OF ALL DEVICES.

K. ALL SHIELDS ON ADDRESSABLE SIGNAL CIRCUITS AND SPEAKER CIRCUITS SHALL BE COVERED WITH HEAT SHRINK TUBING BEFORE TERMINATION.

L. PROVIDE ALL EQUIPMENT, PROGRAMMING AND WIRING REQUIRED FOR A CODE COMPLIANT SYSTEM.

M. PROVIDE POWER BOOSTER SIZED TO ACCOMMODATE NOTIFICATION APPLIANCE QUANTITIES ILLUSTRATED WITH 25% ADDITIONAL SPARE CAPACITY.

N. VISUAL APPLIANCES WITHIN SAME ROOM OR FIELD OF VIEW SHALL BE SYNCHRONIZED.

O. CEILING MOUNTED SMOKE DETECTORS SHALL NOT BE LOCATED CLOSER THAN 3 FT. FROM AIR SUPPLY DIFFUSERS.

P. ALL STROBE LIGHTS SHALL MEET A.D.A. (AMERICANS WITH DISABILITIES ACT) AND NFPA 72 REQUIREMENTS.

Q. COORDINATE LOCATION AND INSTALLATION OF DUCT SMOKE DETECTORS WITH THE MECHANICAL CONTRACTOR. INSTALL REMOTE TEST SWITCHES IN A CEILING TILE OF THE NEAREST ROOM BELOW EACH ROOF TOP UNIT. COORDINATE SWITCH LOCATIONS WITH LIGHTING AND OTHER CEILING MOUNTED DEVICES. INSTALL SUPPLY AND RETURN TEST SWITCHES ADJACENT TO EACH OTHER AND LABEL EACH SWITCH WITH ITS ASSOCIATED DETECTOR AND SYSTEM ADDRESS.

R. PROVIDE PAD LOCKABLE BRANCH CIRCUIT BREAKER DEVICE TO HOLD CIRCUIT BREAKER IN THE CLOSED POSITION, BUT NOT PREVENT OVERCURRENT PROTECTION. FOR ALL BRANCH CIRCUITS SERVING FIRE ALARM CONTROL PANELS, EMERGENCY LIGHTING, AND LIFE SAFETY BRANCH CIRCUITS.

ABBREVIATIONS

ABBREV.	DESCRIPTION
A	AMPERE
AIC	AMPERE INTERRUPTING CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFI	ARC FAULT INTERRUPTING
AL	ALUMINUM
ARS	ARC ENERGY REDUCTION SWITCH
ASD	ADJUSTABLE SPEED DRIVE
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AV	AUDIO/VISUAL
AWG	AMERICAN WIRE GAUGE
BSMT	BASEMENT
C	CONDUIT
CATV	CIRCUIT BREAKER
CB	CABLE TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CLG	CEILING
CM	CONSTRUCTION MANAGER
CONTR	CONTRACTOR
CONT	CONTACTOR
CPT	CONTROL POWER TRANSFORMER
CT	CABLE TRAY
CU	COPPER
DN	DOWN
DN	DISTRIBUTION PANEL
EA	EACH
EC	ELECTRICAL CONTRACTOR
EG	EQUIPMENT GROUND
ELEC	ELECTRIC
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EW	ELECTRIC WATER COOLER
EX	EXISTING
EXP	EXPLOSION PROOF
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FATP	FIRE ALARM PANEL TRANSPONDER PANEL
FBO	FURNISHED BY OTHERS
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
GRS	GALVANIZED RIGID STEEL
HH	HAND HOLE
HOA	HAND-OFF-AUTO
HP	HORSEPOWER
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
JB	JUNCTION BOX
KV	KILOVOLT
KVA	KILOVOLT AMPERE
KW	KILOWATT
KWH	KILOWATT HOUR
LED	LIGHT EMITTING DIODE
LGT	LIGHTING
MC	METAL CLAD CABLE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MFR	MULTI-FUNCTION RELAY
MH	MAN HOLE
MI	MINERAL INSULATED CABLE
MLO	MAIN LUG ONLY
MTS	MANUAL TRANSFER SWITCH
MW	MICROWAVE
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NM	NON-METALLIC SHEATHED CABLE
NMT	NON-METALLIC TUBING
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	MOUNTED OVER COUNTER
OH	OVERHEAD
PNL	PANEL
PH	PHASE
PC	PLUMBING CONTRACTOR OR PHOTO CELL
PG	POLYCARBONATE GUARD
PV	PHOTOVOLT/AC
P	POLE
PB	PULL BOX
PT	POTENTIAL TRANSFORMER
PTZ	PAN TILT ZOOM
REFR	REFRIGERATOR
RMC	RIGID METAL CONDUIT
SP	SPACE
SPD	SURGE PROTECTICE DEVICE
SPEC	SPECIFICATION
STP	SHIELDED TWISTED PAIR
SW	SWITCH
SWBD	SWITCHBOARD
THD	TOTAL HARMONIC DISTRIBUTION
TV	TELEVISION
TV	TYPICAL
UC	MOUNTED UNDER COUNTER HEIGHT OR UNDERGROUND COMMUNICATION
UE	UNDERGROUND ELECTRICAL
UG	UNDERGROUND
UL	UNDERWRITER'S LABORATORY
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR
V	VOLT
W	WIRE OR WATT
WG	WIRE GUARD
WP	WEATHERPROOF
XP	EXPLOSION PROOF
VP	VANDAL PROOF POLYCARBONATE GUARD

BASIC MATERIALS AND METHODS

SYMBOL	DESCRIPTION
	SPECIAL PURPOSE RECEPTACLE. PROVIDE PROPER VOLTAGE, CLASS, CURRENT RATING AND NEMA CONFIGURATION AS REQUIRED BY BRANCH CIRCUIT AND/OR MATCH CAP ON EQUIPMENT BEING FURNISHED BY OTHERS. PROVIDE CORD AND CAP.
	SUBSCRIPT INDICATES TYPE: # - NEMA TYPE
	JUNCTION BOX
	PULLBOX
	SWITCH, VOLTAGE AS INDICATED ON FIXTURE SCHEDULE. SUBSCRIPTS INDICATE TYPE: 3 - THREE WAY SWITCH 4 - FOUR WAY SWITCH LV - LOW VOLTAGE, MOMENTARY CONTACT M - MOMENTARY CONTACT SWITCH OS - OCCUPANCY SENSOR VS - VACANCY SENSOR a,b,c - SWITCHING DESIGNATIONS NUMBER OF LETTERS EQUALS NO. OF GANGED SWITCHES
	DIMMER SWITCH, VOLTAGE AS INDICATED ON FIXTURE SCHEDULE, SUBSCRIPTS INDICATE TYPE: 3 - THREE WAY DIMMER SWITCH 4 - FOUR WAY DIMMER SWITCH a,b,c - SWITCHING DESIGNATIONS NUMBER OF LETTERS EQUALS NO. OF GANGED SWITCHES
	PUSH BUTTON
	EMERGENCY SHUTDOWN PUSH BUTTON, SUBSCRIPT INDICATE TYPE: B - BOILER G - GENERATOR P - POWER
	DUPLEX RECEPTACLE, SUBSCRIPTS INDICATE TYPE: IG - ISOLATED GROUND G - GROUND FAULT CIRCUIT INTERRUPTER T - TAMPER RESISTANT
	TWO DUPLEX RECEPTACLE, SINGLE COVER
	FLOOR BOX, SUBSCRIPT INDICATES TYPE. REFER TO SPECIFICATIONS FOR TYPE DEFINITION.
	FLOOR POKE THROUGH, SUBSCRIPT INDICATES TYPE. REFER TO SPECIFICATIONS FOR TYPE DEFINITION.
	TIME CLOCK
	DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR UOI WITH SUBSCRIPT. SUBSCRIPTS INDICATE TYPE:
	DUAL TECHNOLOGY CEILING MOUNTED VACANCY SENSOR UOI WITH SUBSCRIPT. SUBSCRIPTS INDICATE TYPE:
	C - ULTRASONIC
	POWER/COMMUNICATIONS POLE
	ELECTRIC HAND DRYER
	HAIR DRYER, MODEL #
	REFERENCE TO DRAWING NOTE
	REFERENCE TO DEMOLITION NOTE

ONE LINE DIAGRAM SYMBOLS

SYMBOL	DESCRIPTION
	FUSED DISCONNECT SWITCH
	NON-FUSED DISCONNECT SWITCH
	THERMAL MAGNETIC MOLDED CASE CIRCUIT BREAKER
	CIRCUIT BREAKER SOLID STATE TRIP CHARACTERISTICS INDICATED BY SUBSCRIPTS: AT - TRIP COIL AMPERE RATING AF - FRAME SIZE AMPERE RATING CL - CURRENT LIMITING L - LONG TIME TRIP S - SHORT TIME TRIP I - INSTANTANEOUS TRIP G - GROUND FAULT TRIP SH - SHUNT TRIP
	UTILITY METER
	TRANSFORMER, REFER TO SCHEDULE OR ONE-LINE
	GROUND CONNECTION
	FEEDER DESIGNATION - REFER TO FEEDER SCHEDULE
	PANELBOARD

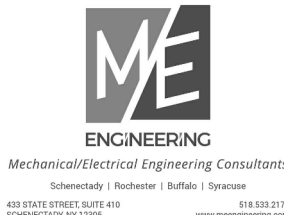
SYMBOL	DESCRIPTION
	LUMINAIRE. UPPER CASE LETTERS INDICATE FIXTURE TYPE ON SCHEDULE, LOWER CASE LETTER INDICATES SWITCHING DESIGNATION.
	WALL MOUNTED LUMINAIRE. UPPER CASE LETTERS INDICATE FIXTURE TYPE ON SCHEDULE, LOWER CASE LETTER INDICATES SWITCHING DESIGNATION.
	INDICATES FIXTURE WITH INTEGRAL BATTERY BACKUP.
	WALL MOUNTED EMERGENCY LUMINAIRE WITH BATTERY PACK
	CEILING MOUNTED EXIT LUMINAIRE
	WALL MOUNTED EXIT LUMINAIRE

SYMBOL	DESCRIPTION
	TRANSFORMER, REFER TO ONE LINE DIAGRAM AND TRANSFORMER SCHEDULE FOR SIZE AND TYPE
	208/120 [240/120] VOLT PANELBOARD
	FUSED DISCONNECT SWITCH AMP RATING AS INDICATED
	ELECTRICAL CONNECTION. REFER TO ELECTRIC EQUIPMENT AND CONTROL SCHEDULE FOR DESCRIPTION, LETTERS AND NUMBERS REFER TO "ITEM DESIGNATION" ON THE SCHEDULE.
	CONTACTOR
	SINGLE POINT CONNECTION TO EQUIPMENT

FIRE ALARM

SYMBOL	DESCRIPTION
	MANUAL PULL STATION
	SMOKE DETECTOR
	COMBINATION SET TEMPERATURE AND RATE OF RISE HEAT DETECTOR
	COMBINATION SMOKE AND HEAT DETECTOR. SUBSCRIPT "WG" INDICATES WIRE GUARD.
	CARBON MONOXIDE DETECTOR
	DUCT SMOKE DETECTOR
	SAMPLING SMOKE DETECTOR
	SMOKE DETECTOR, BEAM TYPE TRANSMITTER
	SMOKE DETECTOR, BEAM TYPE RECEIVER
	NOTIFICATION APPLIANCE, AUDIBLE AND VISUAL # INDICATES STROBE CANDELA C - INDICATES CEILING
	NOTIFICATION APPLIANCE, VISUAL # INDICATES STROBE CANDELA C - INDICATES CEILING
	CARBON MONOXIDE NOTIFICATION APPLIANCE, AUDIBLE AND VISUAL; # INDICATES STROBE CANDELA
	NOTIFICATION APPLIANCE, AUDIO/VISUAL WITH BELL
	MAGNETIC DOOR HOLDER
	TAMPER SWITCH
	SPRINKLER WATERFLOW SWITCH (PADDLE OR PRESSURE SWITCH TYPE)
	SPRINKLER OXY OR BUTTERFLY VALVE TAMPER SWITCH.
	DRY PIPE PRESSURE SWITCH
	FAN SHUT DOWN RELAY
	SMOKE HATCH
	SMOKE DAMPER
	ELEVATOR CAPTURE
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL

SYMBOL	DESCRIPTION
	COMBINATION OUTLET TYPES AS INDICATED. PROVIDE BACKBOX & CONDUIT STUBBED TO ACCESSIBLE CEILING FOR DATA AT ALL LOCATIONS.
	AV DEVICE QUANTITIES INDICATED FOR COORDINATION PURPOSES ONLY. #*C - PROVIDE BACKBOX & CONDUIT SIZE AS INDICATED WITH PULLSTRING STUBBED ABOVE ACCESSIBLE CEILING.
	PROVIDE QUANTITY OF POWER RECEPTACLES INDICATED. # P - POWER DUPLEX RECEPTACLES #B-30A - POWER LS-30 TYPE RECEPTACLE. PROVIDE (2) #10 & (1) #10C.
	FOR COORDINATION PURPOSES ONLY: #T - TELEPHONE OUTLETS #SDI - VIDEO SIGNAL CONNECTION #XLR - AV CONNECTION #V- AUDIO/ VIDEO CONNECTION (NOTE: REFER TO INDIVIDUAL DEVICE SYMBOLS FOR ADDITIONAL SUBSCRIPT DEFINITIONS)
	EXAMPLE SYMBOL SHOWN INDICATES : 2" CONDUIT, 2 DUPLEX RECEPTACLES AND 1 SDI OUTLET
	EXAMPLE SYMBOL SHOWN INDICATES : 2 DUPLEX RECEPTACLES AND 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING FOR DATA CABLING BY OTHER.



LIFE Church, NY
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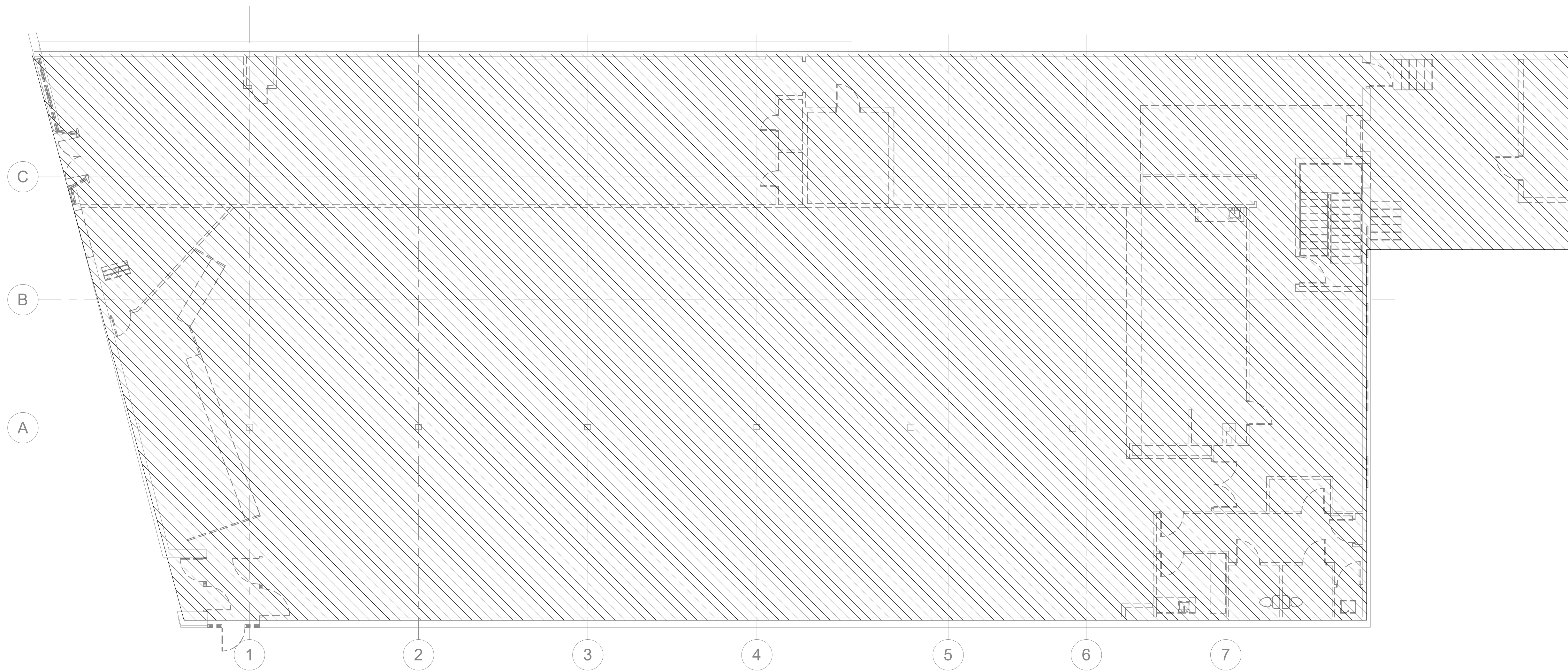
ELECTRICAL
LEGEND,
ABBREVIATIONS, &
NOTES

E0.01

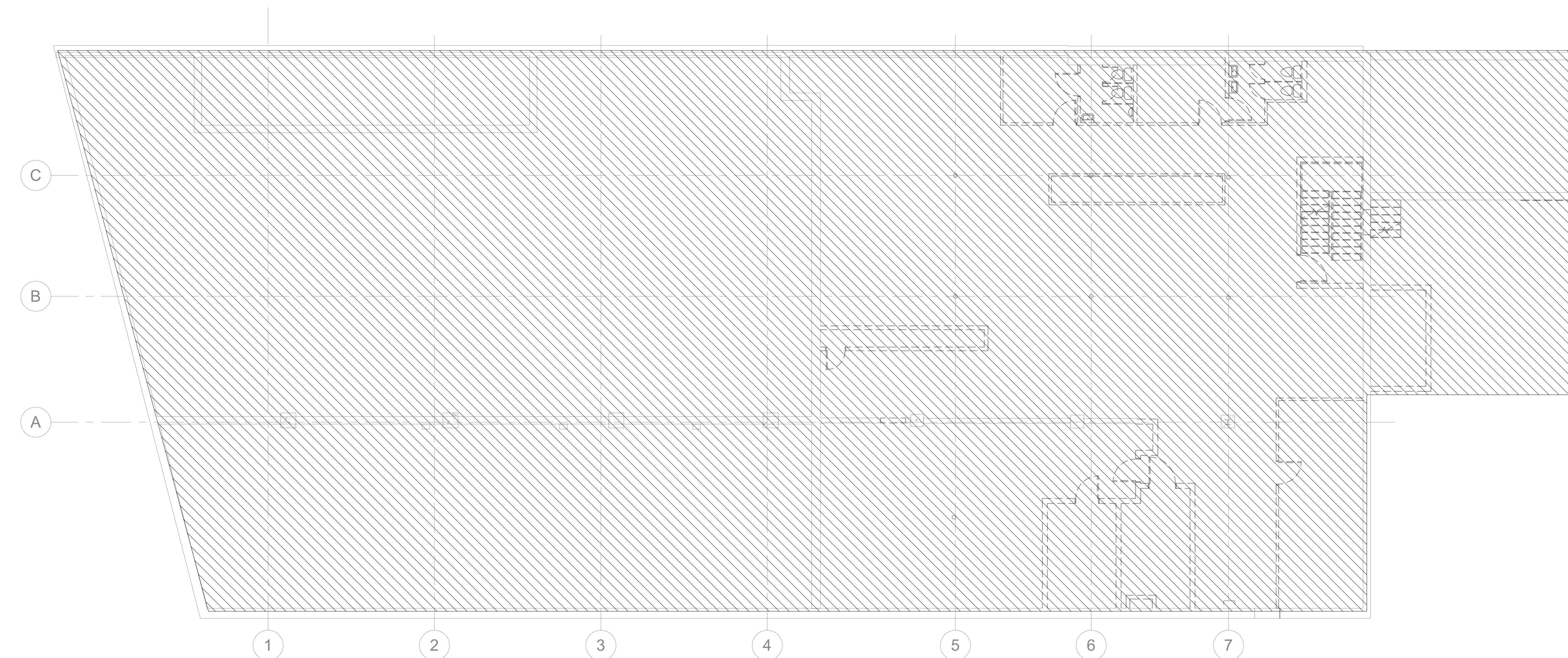


ED1.1 - GENERAL NOTES

- A. DISCONNECT AND REMOVE ALL ELECTRICAL ITEMS WITHIN THE PROJECT SCOPE AREA. REMOVE ALL WIRING BACK TO SOURCE. DO NOT LEAVE ANY WIRING, RACEWAY, DEVICES, ETC. IN PLACE. COORDINATE ALL REMOVALS WORK WITH OTHER TRADES.



② **FIRST FLOOR ELECTRICAL REMOVALS PLAN**
1/8" = 1'-0"



① **BASEMENT ELECTRICAL REMOVALS PLAN**
1/8" = 1'-0"

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**ELECTRICAL
REMOVALS PLAN**

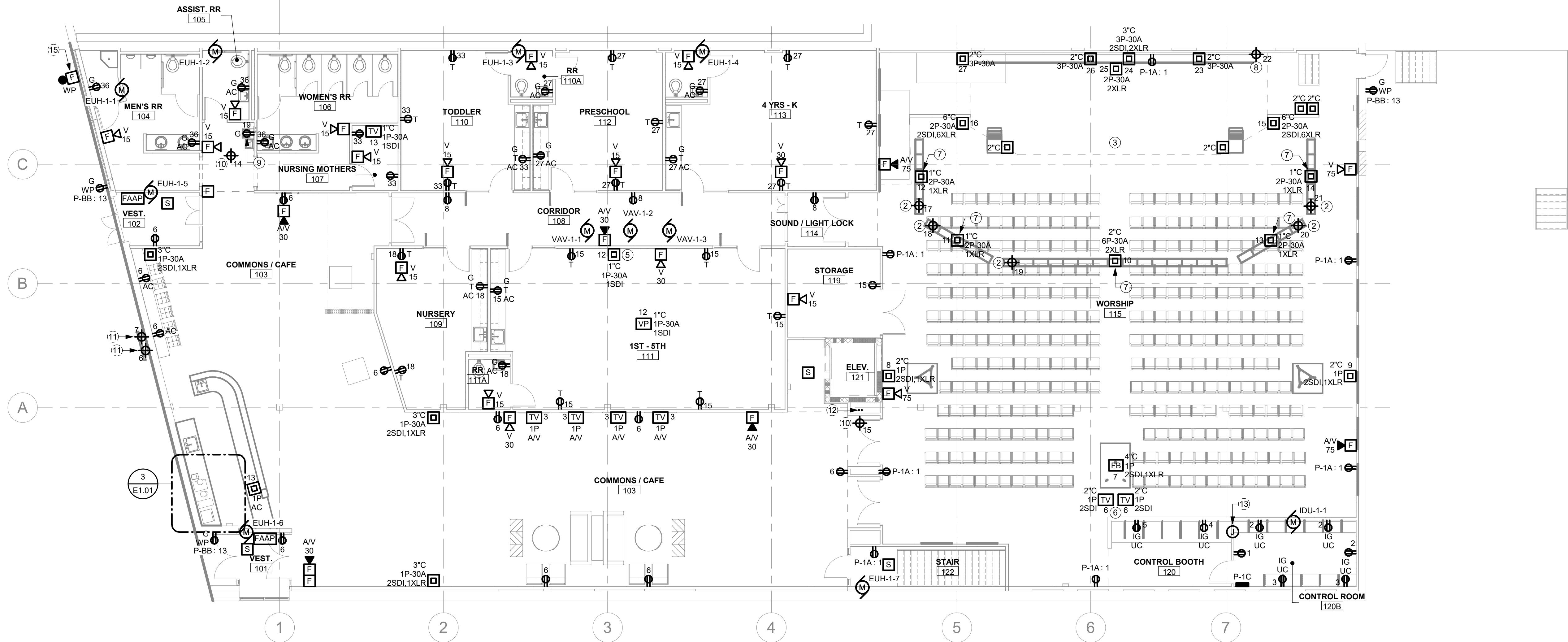
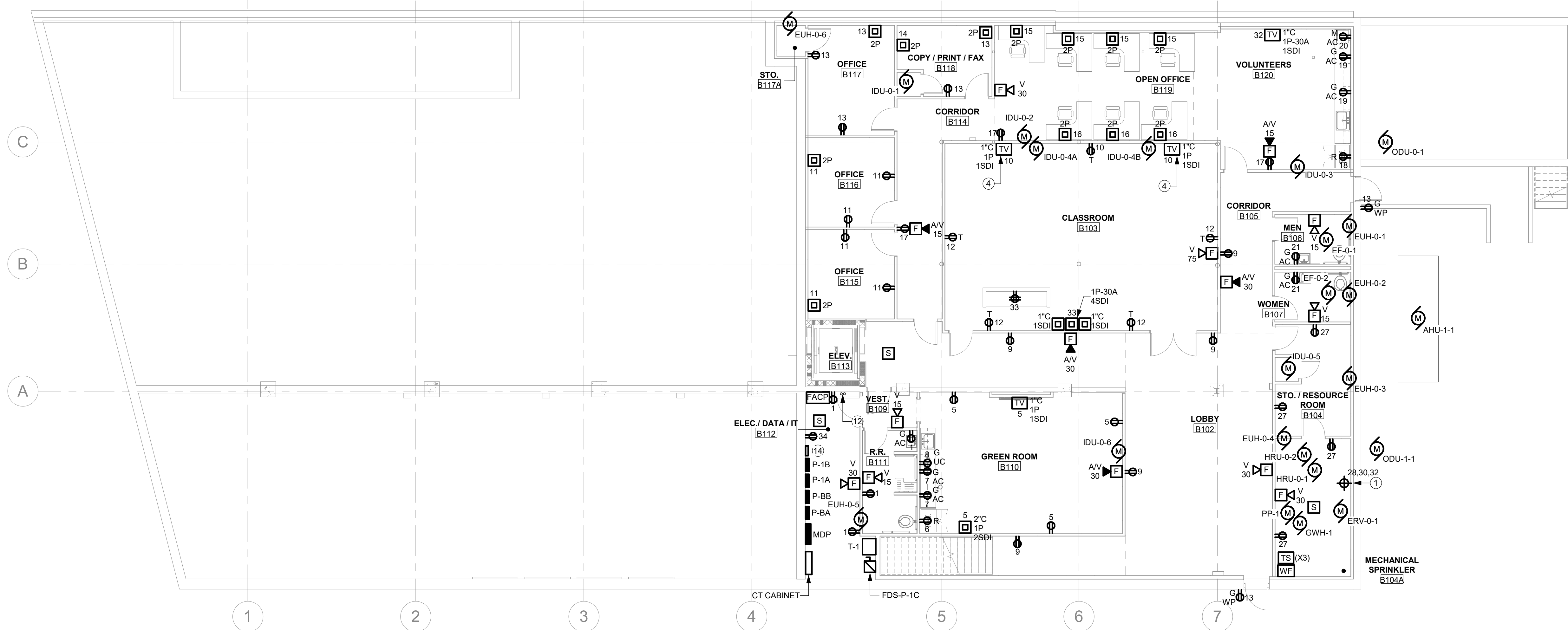
ED1.01

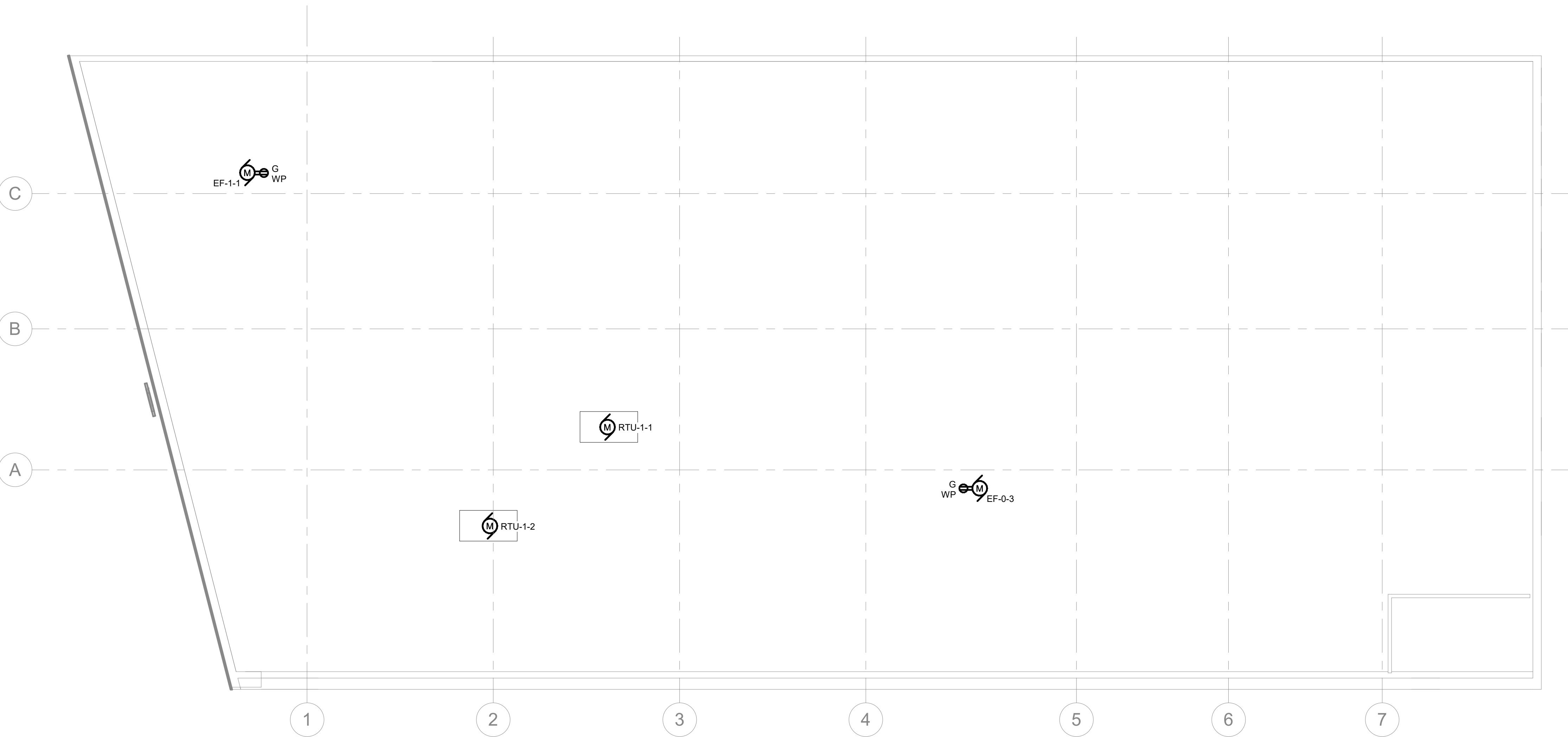
**E1.01 - GENERAL NOTES**

- UNLESS OTHERWISE NOTED, ALL BRANCH CIRCUIT WIRING SHALL BE (2)#12, (1)#12G IN 1/2" C.
- ALL APPLIANCES INCLUDING BUT NO LIMITED TO MICROWAVES, REFRIGERATORS, BEVERAGE COOLERS SHALL BE PROVIDED WITH DEDICATED 20A/1P CIRCUIT BREAKERS AND BRANCH WIRING.
- PROVIDE OUTLET BOX MOLDABLE PUTTY PADS ON BACK SIDES OF ALL OUTLETS AND BACK BOXES IN COMMON WALLS TO MEET OR EXCEED COMPLIANCE WITH UL FIRE RATING OF WALL. MOLDABLE PUTTY PADS SHALL BE PROVIDED FOR DEVICE BOXES MOUNTED WITHIN 24" OF HORIZONTAL SPACING, BOXES EXCEEDING 16 SQUARE INCHES IN SIZE, OR THE AGGREGATE AREA OF THE BOXES EXCEEDS 100 SQUARE FEET OF THE WALL. ALSO PROVIDE MOLDABLE PUTTY PADS FOR BOXES INSTALLED BACK-TO-BACK CLOSER THAN 2" IN RATED WALLS.
- EACH BRANCH CIRCUIT HOMERUN CONDUIT SHALL HAVE NO MORE THAN THREE CIRCUITS. EACH BRANCH CIRCUIT HOMERUN CONDUIT SHALL HAVE A SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR. NO CIRCUIT NEUTRAL ARE TO BE SHARED. EACH BRANCH CIRCUIT SHALL HAVE ITS OWN DEDICATED NEUTRAL CONDUCTOR. NO TRUNKING OF BRANCH CIRCUITS ON A COMMON NEUTRAL ALLOWED.
- ALL POWER/DATASYSTEMS SHALL BE ROUTED THROUGH CORRIDOR IN A NEAT AND WORKLIKE MANNER, WHILE ENTERING THE ROOM AT A COMMON LOCATION. PROVIDE A FIRE-RATED SLEEVE FOR EACH PENETRATION IN A RATED WALL, AND A TYPICAL SLEEVE FOR ALL NON-RATED PENETRATION LOCATIONS.
- ALL DEVICE MOUNTING HEIGHTS TO BE COORDINATED WITH ARCHITECTURAL ELEVATIONS.
- ALL DEVICES SHOWN GROUPED SHALL BE GANGED UNDER A SINGLE COVER PLATE.
- ALL ELECTRICAL DEVICES AND ALL EQUIPMENT ON THE BASEMENT SHALL BE FED FROM PANEL "P-BA" AND "P-BB" UNLESS NOTED OTHERWISE.
- ALL ELECTRICAL DEVICES AND ALL EQUIPMENT ON THE FIRST FLOOR SHALL BE FED FROM PANEL "P-1A" AND "P-1B" UNLESS NOTED OTHERWISE.
- ALL RECEPTACLES CIRCUITED FROM PANEL "P-1C" SHALL BE THE "IG" TYPE AND CARRY AND ADDITIONAL INSULATED GROUND WIRE FOR CONNECTION AT RECEPTACLE AND THE ISOLATED GROUND BAR WITHIN PANEL. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

E1.01 - GENERAL NOTES

- PROVIDE 208V/3P POWER CONNECTION AND MEANS OF DISCONNECT FOR DUCT HEATER MOUNTED TO DUCTWORK. PROVIDE SWITCH TO TOGGLE BETWEEN SUMMER(OFF) WINTER (ON) OPERATION. COORDINATE CONNECTION WITH MC.
- PROVIDE POWER CONNECTION AND (2) BRANCH CIRCUITS TO THE THEATRICAL LIGHT BAR. PROVIDE POWER CONNECTION AND CONTROLS TO THE POWERED WINCH. BEAM SHAL BE RAISED AND LOWERED BY A POWERED WINCH TO FACILITATE ADJUSTMENT OF THEATRICAL LIGHTING. PROVIDE ADDITIONAL SLACK CABLE. COORDINATE LOCATION OF CONTROLS TO THE WINCH WITH OWNER.
- PROVIDE CONNECTIONS TO ALL THEATRICAL LIGHTING AND CONTROLS (BY OTHERS).
- PROVIDE 1" C. WITH PULLSTRING FROM THIS LOCATION TO CONTROL BOOTH LOCATED WITHIN THIS CLASSROOM. COORDINATE EXACT ROUTING AND LOCATIONS IN THE FIELD WITH ARCHITECT/OWNER.
- PROVIDE 1" C. WITH PULLSTRING FROM THIS LOCATION TO PROJECTOR LOCATED IN THIS ROOM. COORDINATE EXACT ROUTING AND LOCATIONS IN THE FIELD WITH ARCHITECT/OWNER.
- TVS TO BE HUNG FROM STRUCTURE. COORDINATE EXACT LOCATION IN THE FIELD AND WITH THE ARCHITECT/OWNER.
- COMMUNICATION COMBINATION BOX TO BE HUNG FROM CEILING. COORDINATE EXACT LOCATION IN THE FIELD AND WITH THE OWNER. PROVIDE INDICATED CONDUIT STUBBED 12" BELOW ROOF DECK.
- PROVIDE POWER CONNECTION TO LED SCREEN. COORDINATE REQUIREMENTS WITH AV PROVIDER.
- LOCATE RECEPTACLE PER MANUFACTURERS REQUIREMENTS.
- PROVIDE 120V POWER CONNECTION FOR MOTORIZED DAMPER. COORDINATE WITH MC.
- PROVIDE 120V/20A CIRCUIT FOR POWER TO THE EXTERIOR SIGN. COORDINATE/VERIFY POWER REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN.
- PROVIDE (2) 3" CONDUITS WITH PULL STRINGS FROM BASEMENT TO FIRST FLOOR ABOVE ACCESSIBLE CEILING. COORDINATE ROUTING IN THE FIELD.
- EC TO PROVIDE AND SIZE JUNCTION BOX AS REQUIRED FOR ALL AV CONNECTIONS. COORDINATE THE REQUIREMENTS WITH AV CONTRACTOR.
- LOCATE LIGHTING INVERTER WITHIN ELECTRICAL ROOM, PROVIDE 120V POWER CONNECTION. COORDINATE EXACT LOCATION IN THE FIELD.
- BELL PROVIDED BY FP CONTRACTOR. EC TO INSTALL. COORDINATE CONNECTION. LOCATION IN THE FIELD WITH FP CONTRACTOR.

3 CAFE PARTIAL ENLARGED POWER PLAN
3/8" = 1'-0"**4 PARTIAL CAFE ELEVATION VIEW**
3/8" = 1'-0"**2 FIRST FLOOR POWER & SYSTEMS NEW WORK PLAN**
1/8" = 1'-0"**1 BASEMENT POWER & SYSTEMS NEW WORK PLAN**
1/8" = 1'-0"



1 ROOF ELECTRICAL PLAN
1/8" = 1'-0"

E1.02 - GENERAL NOTES

- A. PROVIDE WEATHERPROOF GFI RECEPTACLE WITH IN-USE COVER AT LOCATIONS INDICATED. MOUNT TO STRUCTURE. RECEPTACLES SHALL NOT BE CIRCUITED TO THE LOAD SIDE OF EQUIPMENT DISCONNECTING MEANS IF RECEPTACLES ARE INTEGRAL WITH UNIT, OR MOUNTED TO UNIT.
- B. FOR ALL HVAC AND PLUMBING EQUIPMENT CONNECTIONS; REFER TO ELECTRICAL EQUIPMENT AND CONTROL SCHEDULE FOR ALL CIRCUITING AND CONTROL REQUIREMENTS. CONTROL DEVICES ARE ONLY SHOWN IN PLAN VIEW WHERE INDICATED AS "REMOTE" (RE). OTHERWISE SHALL BE INSTALLED AS NOTED AND TO SUIT FIELD CONDITIONS.
- C. REFER TO ARCHITECTURAL PLANS FOR ROOF PENETRATION DETAILS.



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ROOF ELECTRICAL
PLAN

E1.02



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LIGHTING NEW
WORK PLAN

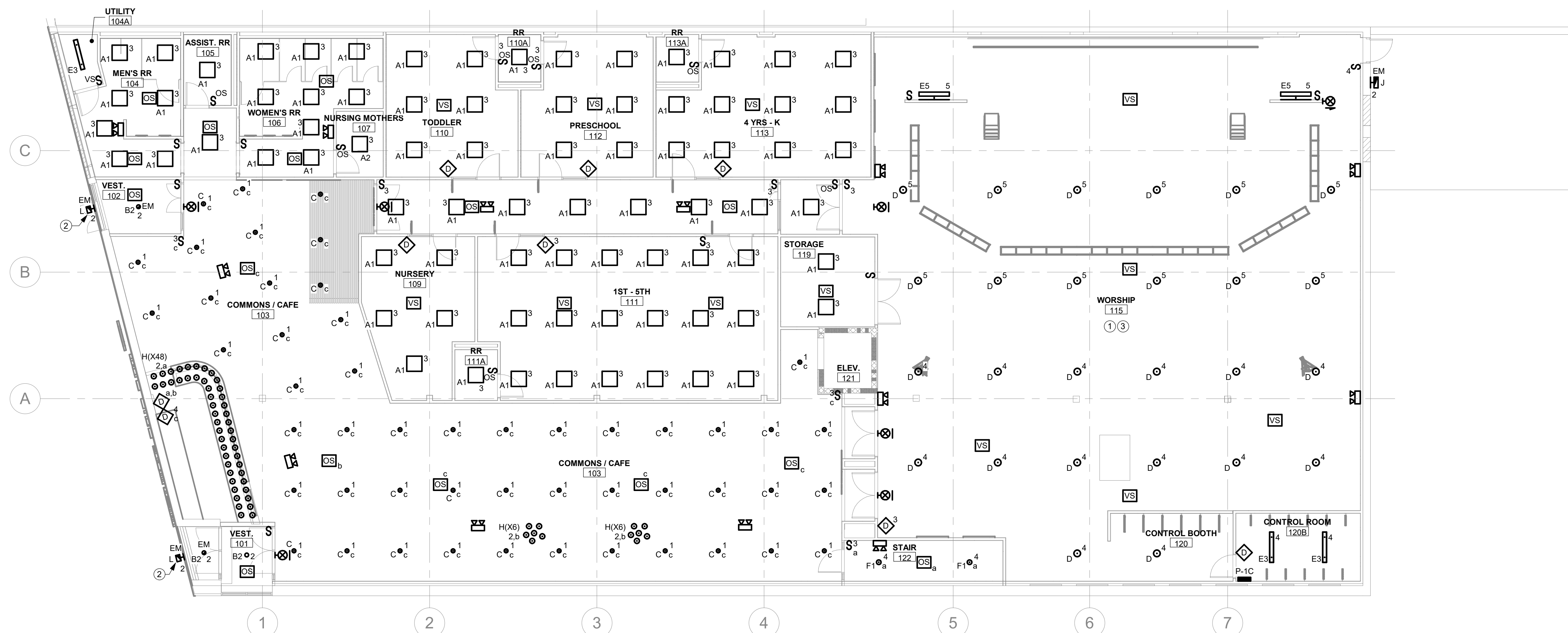
E2.01

E2.01 - GENERAL NOTES

- EXIT SIGNS SHALL BE CONNECTED TOGETHER TO A SINGLE CIRCUIT SEPERATE FROM ANY OTHER LOADS.
- PROVIDE SEGREGATED EMERGENCY POWER BRANCH CIRCUITING FROM EACH EXIT LUMINAIRE TO NEAREST UNLOADED EXIT LUMINAIRE CIRCUIT
- CONTRACTOR SHALL COORDINATE FIXTURE LOCATIONS WITH ALL EQUIPMENT, MECHANICAL DIFFUSERS AND ALL DEVICES ON THE CEILING. ALL LIGHT FIXTURES SHALL BE INSTALLED SO THAT DOOR OPENS FULLY FOR MAINTENANCE NOT OBSTRUCTED BY ANY EQUIPMENT OR EQUIPMENT SUPPORTS/RAILS.
- ALL LIGHTING LOCATIONS ARE DIAGRAMATIC. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND ANY INTERIOR OR EXTERIOR ELEVATIONS APPLICABLE. MOUNTING HEIGHTS ARE LISTED ON LUMINAIRE SCHEDULE FOR WALL MOUNTED FIXTURES.
- EMERGENCY LIGHTING UNITS (ELUs) SHALL BE CONNECTED AHEAD OF ANY SWITCHING TO THE SAME BRANCH CIRCUIT SERVING THE LIGHTING IN THAT AREA.
- DRAWINGS ARE DIAGRAMATIC AND INDICATE SWITCHING AND DIMMING INTENT. PROVIDE ALL COMPONENTS NECESSARY TO ACHIEVE DESIRED SWITCHING/DIMMING THAT IS COMPATIBLE WITH SCHEDULED LIGHTING FIXTURES.
- LOCATIONS INDICATED FOR LIGHTING FIXTURES ARE APPROXIMATE. LOCATE FIXTURES AS REQUIRED TO AVOID INTERFERENCE WITH BUILDING STEEL, PIPING, DUCTWORK, CONDUIT, DIFFUSERS, GRILLES, SPEAKERS, SMOKE DETECTORS, ETC. FIELD COORDINATE EXACT LOCATIONS AS NEAR AS POSSIBLE TO THE LOCATION INDICATED.
- PROVIDE OCCUPANCY SENSOR TYPES WITH COVERAGES THAT MATCH SPECIFIC ROOM OF INSTALLATION.
- ALL LIGHTING FIXTURES LOCATED IN THE BASEMENT SHALL BE FED FROM PANEL "P-B", CIRCUIT 42, UNLESS NOTED OTHERWISE.
- ALL LIGHTING FIXTURES LOCATED ON THE FIRST FLOOR SHALL BE FED FROM PANEL "P-1B", UNLESS NOTED OTHERWISE.

E2.01 - GENERAL NOTES

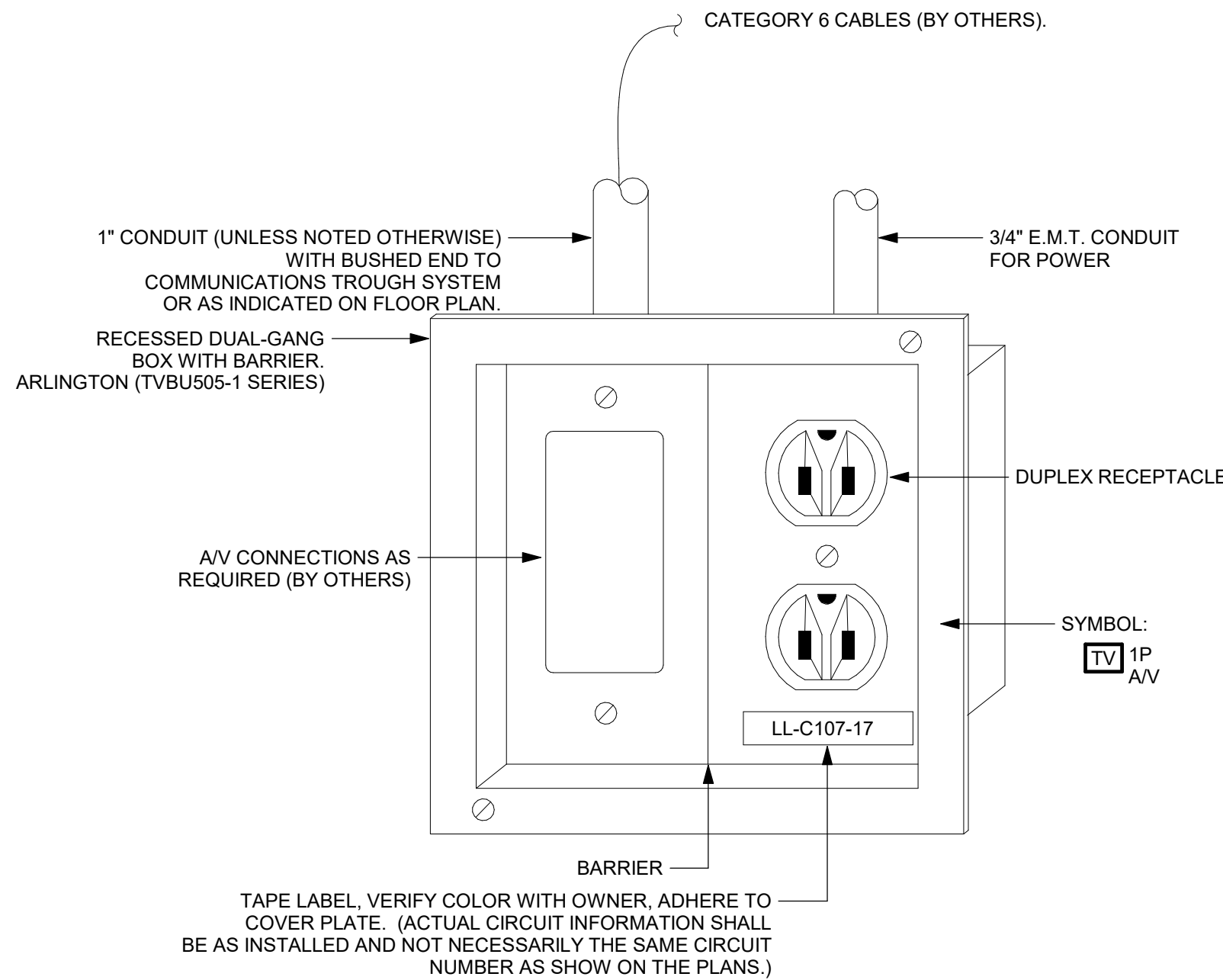
- PROVIDE UL-924 DEVICE AND INTERFACE CONNECTION TO THE FIRE ALARM SYSTEM SO THAT IN THE EVENT OF ALARM ALL GENERAL HOUSE LIGHTING IN THE WORSHIP AREA SHALL GO TO 100% OUTPUT.
- PROVIDE LIGHTING INVERTER (ISO-LITE E3 MINI) FOR EXTERIOR TYPE "L" FIXTURES.
- ALL WORSHIP CENTER LIGHTING TO BE INTEGRATED WITH A/V SYSTEM. PROVIDE ALL INTERCONNECTIONS AND REQUIREMENTS FOR A COMPLETE SYSTEM WITH A/V CONTRACTOR AND OWNER.



FIRST FLOOR LIGHTING NEW WORK PLAN
1/8" = 1'-0"



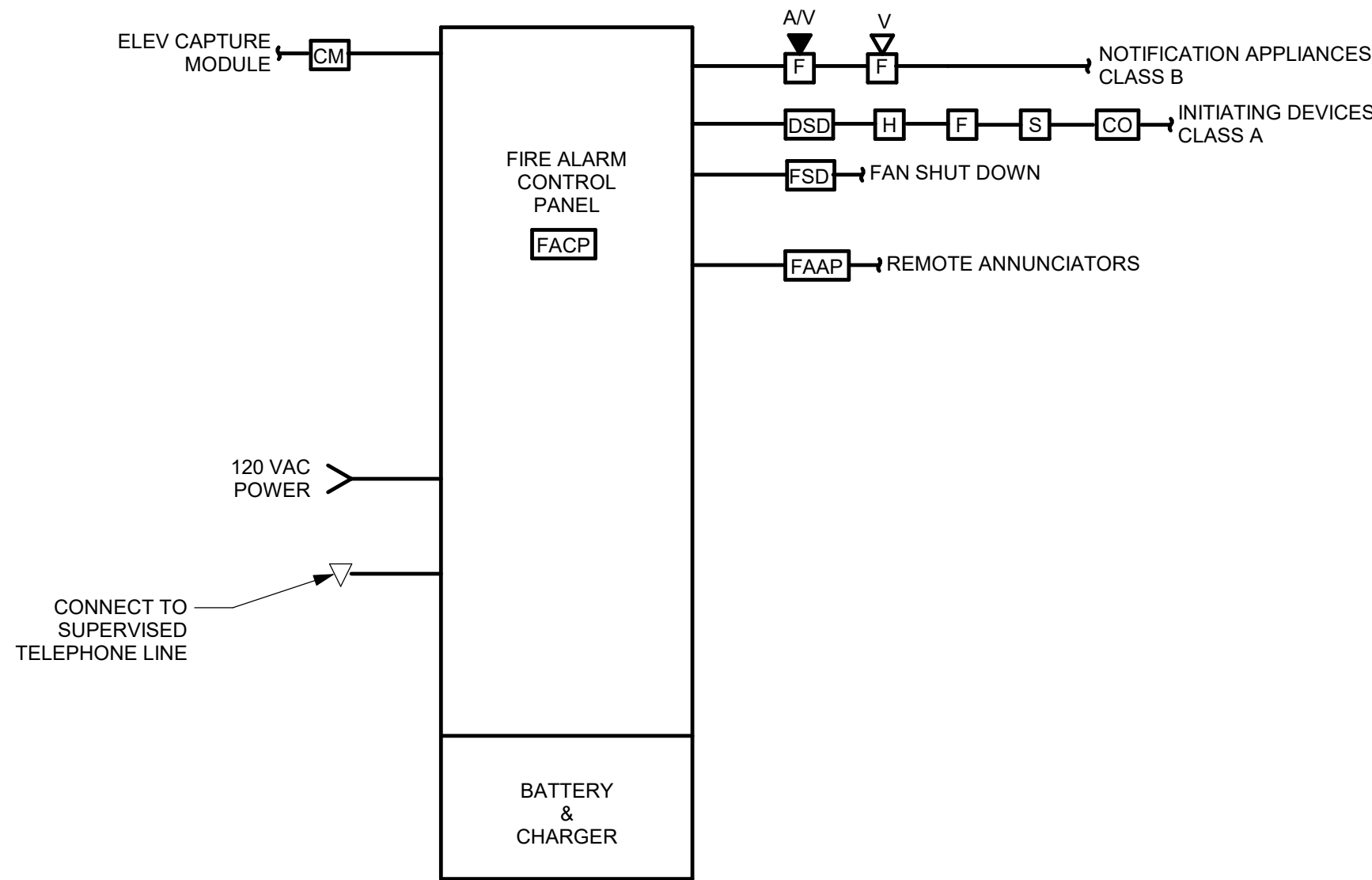
BASEMENT LIGHTING NEW WORK PLAN
1/8" = 1'-0"



DETAIL NOTES:

1. PROVIDE GREEN GROUND WIRE IN ALL RECEPTACLE CIRCUITS. CONNECT TO GROUND BUS IN PANEL.
2. DO NOT INSTALL OUTLETS BACK TO BACK. INSTALL IN ADJACENT STUD CAVITIES TO REDUCE SOUND TRANSMISSION.
3. ALL LOW VOLTAGE CABLING INDICATED IS BY OTHERS.
4. CONFIRM MOUNTING TYPE AND PROVIDE APPROPRIATE BACBOX FOR THE MOUNTING TYPE.

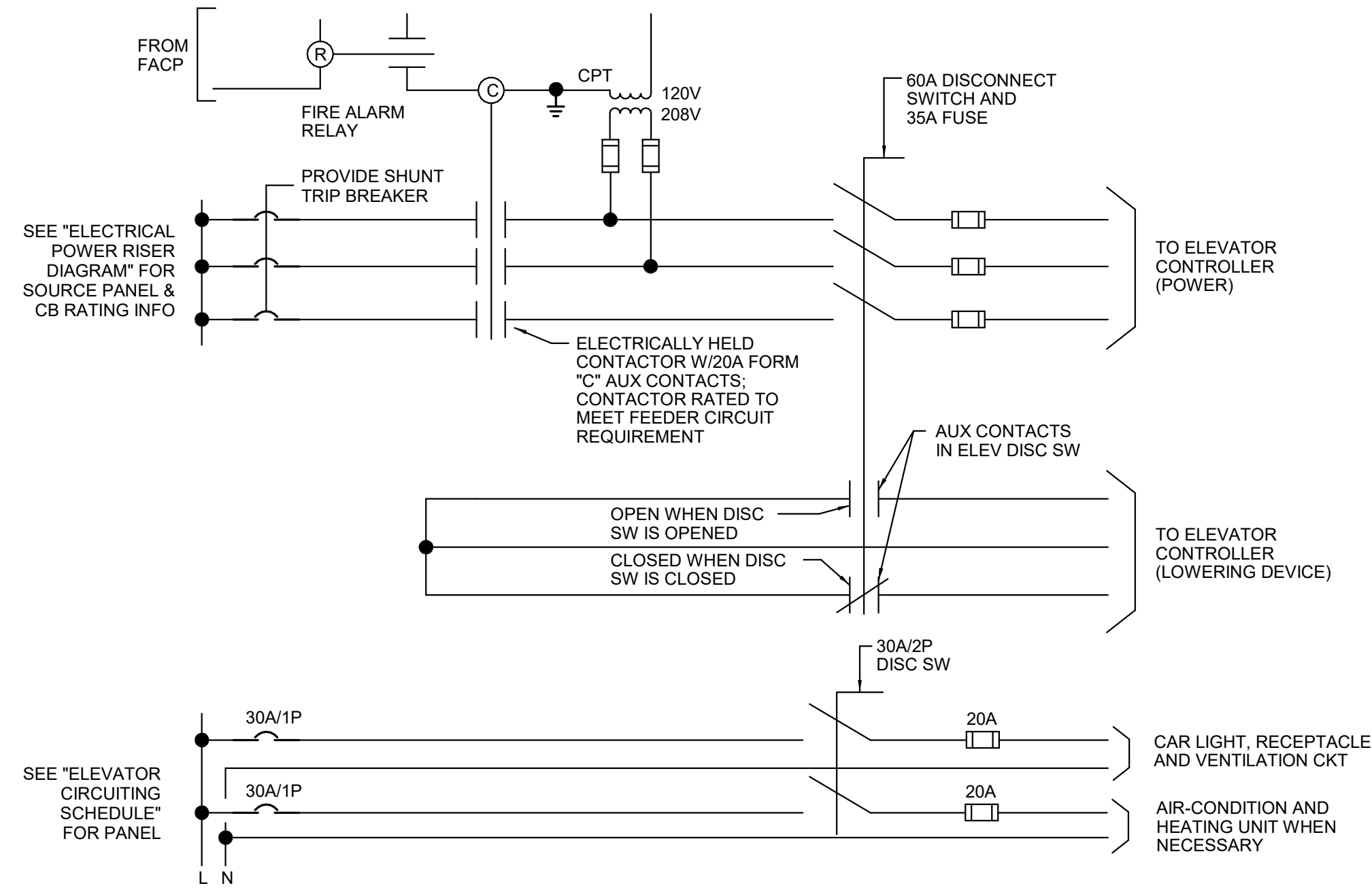
4 TYPICAL COMBINATION TELEVISION JACK AND RECEPTACLE DETAIL
NTS



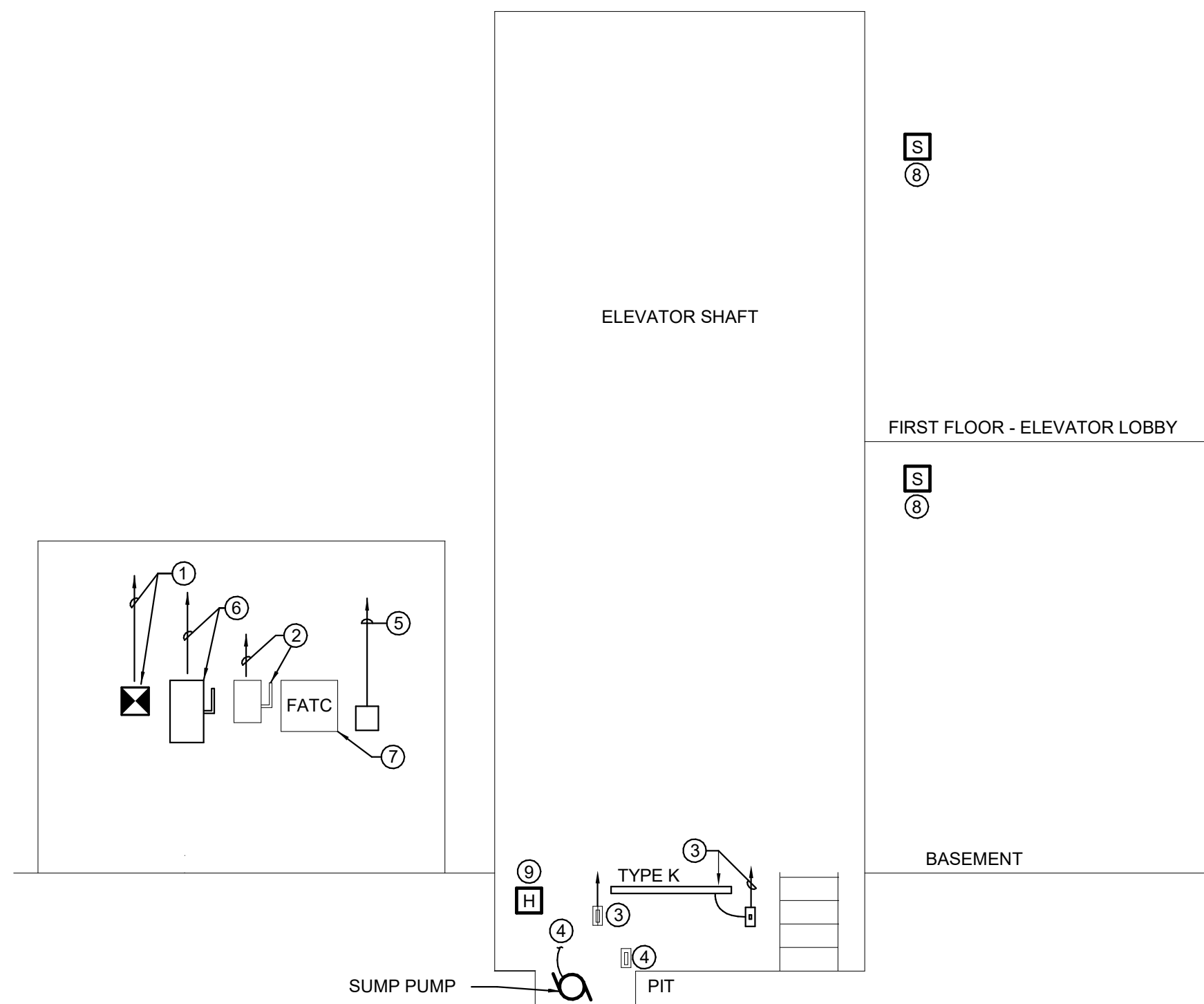
GENERAL NOTES:

- A. PROVIDE PAD LOCKABLE BRANCH CIRCUIT BREAKER DEVICE TO HOLD CIRCUIT BREAKER IN THE CLOSED POSITION, BUT NOT TO PREVENT OVERCURRENT PROTECTION, FOR ALL BRANCH CIRCUITS SERVING FIRE ALARM CONTROL PANEL, EMERGENCY LIGHTING, AND LIFE SAFETY BRANCH CIRCUITS.
- B. ACTIVATION OF MANUAL PULL STATION, SMOKE DETECTOR, HEAT DETECTOR OR SPRINKLER SYSTEM WATER FLOW SWITCH SHALL INITIATE THE PREDEFINED FIRE ALARM SYSTEM "ALARM" SEQUENCE:
1. DISPLAY ALARM CONDITION AT FIRE ALARM CONTROL UNIT AND REMOTE ANNUNCIATOR(S).
 2. ENERGIZE AUDIBLE AND VISUAL NOTIFICATION CIRCUITS WITHIN EVACUATION AREA(S) AS DESIGNED BY PRE-ESTABLISHED CONTROL UNIT SEQUENCE OF OPERATIONS.
 3. PERFORM AUXILIARY FIRE SAFETY FUNCTIONS AS DESIGNATED BY PRE-ESTABLISHED CONTROL UNIT SEQUENCE OF OPERATIONS SUCH AS ELEVATOR RECALL, DAMPER ACTIVATION, DOOR CLOSURE, AHU SHUTDOWN, PRESSURIZATION SYSTEMS, ETC.
 4. TRANSMIT ALARM CONDITION TO CENTRAL /SUPERVISING STATION AND/OR LOCAL FIRE DEPARTMENT.
- C. THE OPERATION OF SPRINKLER TAMPER SWITCH OR DUCT SMOKE DETECTOR SHALL INITIATE THE PREDEFINED FIRE ALARM SYSTEM "SUPERVISORY" SEQUENCE:
1. DISPLAY SUPERVISORY CONDITION AT FIRE ALARM CONTROL UNIT AND REMOTE ANNUNCIATOR(S).
 2. TRANSMIT SUPERVISORY CONDITION TO CENTRAL / SUPERVISING STATION.
- D. NORMAL POWER FAILURE TO FIRE ALARM SYSTEM REMOTE POWER SUPPLIES, GROUND FAULTS, SHORT CIRCUITS AND OPEN CIRCUIT CONDITIONS SHALL INITIATE THE PREDEFINED FIRE ALARM SYSTEM "TROUBLE" SEQUENCE:
1. DISPLAY SUPERVISORY CONDITION AT FIRE ALARM CONTROL UNIT AND REMOTE ANNUNCIATOR(S).
 2. TRANSMIT TROUBLE CONDITION TO CENTRAL / SUPERVISING STATION.
 3. OPERATION OF NEW IN-DUCT SMOKE DETECTOR PROVIDED AT AIR HANDLING UNITS (AHU'S) SHALL SHUT-DOWN THE CORRESPONDING AHU. OPERATION OF AN IN-DUCT DETECTOR PROVIDED FOR CONTROL OF SMOKE DAMPER SHALL CLOSE THE CORRESPONDING AHU.
- E. ALL FIRE ALARM SYSTEM RACEWAY SIZES AND CIRCUITRY REQUIREMENTS SHALL BE INSTALLED WITH EQUIPMENT MANUFACTURERS WIRING DIAGRAM, SHOP DRAWINGS AND ALL APPLICABLE CODES THAT MAY APPLY.
- F. DRAWINGS ARE INTENDED TO ILLUSTRATE MAJOR EQUIPMENT AND THE INTENDED INTERCONNECTIONS. REFER TO FLOOR PLANS FOR EXACT QUANTITIES AND LOCATION OF ALL DEVICES.
- G. ALL SHIELDS ON ADDRESSABLE SIGNAL CIRCUITS AND SPEAKER CIRCUITS SHALL BE COVERED WITH HEAT SHRINK TUBING BEFORE TERMINATION.

3 FIRE ALARM - BLOCK DIAGRAM
NTS



2 ELEVATOR WIRING DIAGRAM
NTS



ELEVATOR CIRCUITING SCHEDULE				
ELEVATOR EQUIPMENT	ELEVATOR SUMP PUMP	ELEVATOR CAR LIGHTING AND VENTILATION	ELEVATOR CAR HEATING AND AIR COND	ELEVATOR PIT LIGHTING AND RECEPTACLE
PANELBOARD: CIRCUIT #	P-BB-23	P-BB-24	P-BB-25	P-BB-26

DETAIL GENERAL NOTES:

- A. COORDINATE ALL FINAL WIRING CONNECTIONS AND EQUIPMENT INTERFACE WITH ELEVATOR INSTALLER. PROVISIONS FOR CCTV CAMERA AND DATA/COMM DROP TO BE INCLUDED.
- B. SEE ELECTRICAL ONE LINE DIAGRAM AND PANELBOARD SCHEDULES FOR ELEVATOR MACHINE AND SUMP PUMP CIRCUITING INFORMATION.
- C. SEE ELEVATOR CIRCUITING SCHEDULE AND PANELBOARD SCHEDULES FOR ELEVATOR PIT RECEPTACLE CIRCUITING, LIGHTING CIRCUITING, AND ELEVATOR CAR LIGHTING/HVAC CIRCUITING.

DETAIL DRAWING NOTES:

- 1 PROVIDE SHUNT TRIP CIRCUIT BREAKER. SEE ELEVATOR WIRING DIAGRAM.
- 2 PROVIDE 30A/2P FUSED DISCONNECT SWITCH WITH SOLID NEUTRAL AND 20A FUSES TO SUPPLY TWO (2) 120V, 20A CIRCUITS TO ELEVATOR CAR. ONE CIRCUIT SHALL SUPPLY ELEVATOR CAR LIGHTING, RECEPTACLE AND VENTILATION. ONE CIRCUIT SHALL SUPPLY AIR-CONDITION AND HEATING UNIT WHEN NECESSARY. PROVIDE (2)#12-#16G IN 1/2" FOR EACH CIRCUIT.
- 3 PROVIDE ELEVATOR PIT 120V, 20A BRANCH CIRCUIT. (2)#12-#16G, 1/2". CIRCUIT SHALL SUPPLY PIT LIGHTING FIXTURE AND GFI DUPLEX RECEPTACLE. LIGHTING SHALL NOT BE CONNECTED TO THE LOAD SIDE OF THE GFI INTERRUPTER. PROVIDE RECEPTACLE AND LIGHTING FIXTURE. SEE LUMINAIRE SCHEDULE FOR FIXTURE TYPE.
- 4 PROVIDE ELEVATOR PIT SUMP PUMP CONTROLLER 120V, 20A BRANCH CIRCUIT. (2)#12-#16G, 1/2". CIRCUIT SHALL SUPPLY POWER DEDICATED FOR SUMP PUMP CONTROLLER. LOCATION AND ELEVATION OF RECEPTACLE TO BE DETERMINED BY PLUMBING CONTRACTOR. COORDINATE LOCATION AND ELEVATION IN FIELD. ALL WIRING/CABLING BETWEEN SUMP PUMP CONTROLLER AND SUMP PUMP BY OTHERS.
- 5 WALL BOX AND 1-1/2". W/PULL CORD TO DATA/SERVER ROOM LOCATION FOR ELEVATOR TELEPHONE.
- 6 PROVIDE FUSED DISCONNECT SWITCH AND DUAL ELEMENT TIME DELAY FUSES. SEE EE&CS FOR DISCONNECT SWITCH AND FUSE RATINGS.
- 7 FIRE ALARM ADDRESSABLE ELEVATOR CAPTURE MODULE FOR ELEVATOR RECALL OPERATIONS. COORDINATE CONNECTION WITH ELEVATOR INSTALLER.
- 8 ELEVATOR LOBBY AREA SMOKE DETECTOR INITIATING EMERGENCY RECALL OPERATION AND SYSTEM ALARM.
- 9 ELEVATOR PIT HEAT DETECTOR INITIATING EMERGENCY RECALL OPERATION AND SYSTEM ALARM.

1 ELEVATOR DETAIL
NTS

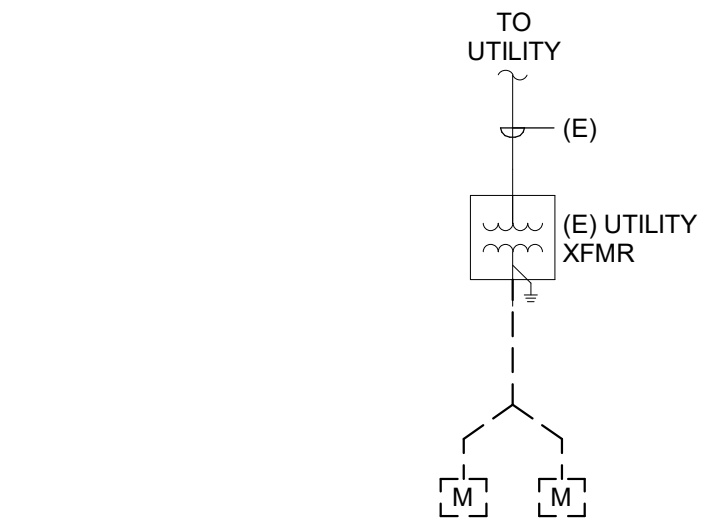
1. PROVIDE AN ISOLATION GROUND WIRE FROM THE TRANSFORMER TO THE PANELBOARD. IN ADDITION TO GROUND INDICATED IN FEEDER TAG. MATCH GROUND SIZE FOR BOTH GROUNDS.
2. PROVIDE ISOLATED GROUND BAR FOR ISOLATED GROUND BRANCH PANELBOARD.
3. PROVIDE ISOLATION TRANSFORMER WITH ELECTROSTATIC SHIELDING. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



LIFE Church, NY
275 Mamaroneck Ave. Mamaroneck, NY 10543
03.03.21

[illegible]

2 POWER DISTRIBUTION ONE-LINE DIAGRAM - NEW WORK
NTS



1 PARTIAL ONE-LINE DIAGRAM REMOVALS PLAN

Revisions		
No.	Description	Date

LIFE Church, NY

Owner

275 Mamaroneck Ave.
Mamaroneck, NY 10543

Project Number

20007

03 03 21

POWER DISTRIBUTION DIAGRAM

E6.01





LIFE Church, NY

275 Mamaroneck Ave.
Mamaroneck, NY 10543

20007
Date

E6.02

PANELBOARD DIRECTORY																			
CKT NO		M/E PROJECT: LIFE Church, NY				PANEL NAME:				P-B#				TYPE: /BRANCH				CKT NO	
		PROJECT NO: 203085												MOUNTING: SURFACE					
		FACILITY:				VOLTAGE: 208Y/120V		L-L		PHASE: 3		OCP TYPE: MLO		BUS RATING: 100 A					
		LOCATION: ELEC / DATA / IT B112				AIC: 65		k		WIRE: 4		MCB RATING:							
				SOURCE: MDP															
		CIRCUIT DESCRIPTION		TRIP	POLE	A		B		C		POLE	TRIP	CIRCUIT DESCRIPTION					
1	REC- ELEC./DATA/IT B112, RR B111	20 A	1	720	50							1	20 A	FACP		2			
3	ELECTR UNIT HEATER (EUH-0-5)	15 A	1		1008	0						1	20 A	FACP		4			
5	REC- GREEN ROOM B110	20 A	1						1020	180		1	20 A	REFRIGERATOR GREEN ROOM B110		6			
7	REC- COUNTERTOP B110	20 A	1	360	180							1	20 A	DISHWASHER GREEN ROOM B110		8			
9	REC- B102, B105	20 A	1			900	208					2	15 A	ELECTRIC UNIT HEATER (EUH-0-6)		10			
11	REC- OFFICE B115, B116	20 A	1						1440	208		1	20 A			12			
13	REC- OFFICE B117, COPY B118	20 A	1	1260	360							1	20 A	REC- COPIER, B118		14			
15	REC- DESKS, OPEN OFFICE B119	20 A	1			1440	1080					1	20 A	REC- DESKS, OPEN OFFICE B119		16			
17	REC- B114, B120	20 A	1						540	180		1	20 A	REC- REFRIGERATOR B120		18			
19	REC- COUNTERTOP B120	20 A	1	360	180							1	20 A	REC- MICROWAVE B120		20			
21	REC- MEN B106, WOMEN B107	20 A	1			360	60					1	15 A	EXHAUST FAN (EF-0-1)		22			
23	ELECTRICAL UNIT HEATER (EUH-0-1)	15 A	2					208	60			1	15 A	EXHAUST FAN (EF-0-2)		24			
25				208	208							2	15 A	ELECTRICAL UNIT HEATER (EUH-0-2)		26			
27	REC- B104, B104A	20 A	1			720	208					1	20 A	ELECTRICAL LUNIT HEATER (EUH-0-4)		28			
29	ELECTRICAL UNIT HEATER (EUH-0-3)	15 A	2						249.6	1008		1	30 A	TV- B120		32			
31				249.6	180							1	30 A			34			
33	REC- CLASSROOM B103	30 A	1			540	20.8					2	15 A	VRF SPLIT SYSTEM (HRU-0-1)		36			
35										20.8						38			
37					15.6							2	15 A	VRF SPLIT SYSTEM (HRU-0-2)		40			
39	PUMP (PP-1)	20 A	1			432	15.6					2	15 A	VFD LT- BASEMENT		42			
41	GAS WATER HEATER (GWH-1)	20 A	1						600	1619		1	20 A			44			

LUMINAIRE SCHEDULE							
TYPE	DESCRIPTION	MFR. & CATALOG NO.	LAMP	VOLTAGE / BALLAST	MOUNTING	UNIT WATTS	REFERENCE NOTES
A1	2'x2' FLAT LED PANEL	LITHONIA LIGHTING: EPANL LED SERIES	LED, 3500K, 80CRI 2000LM	MVOLT 0-10V-10% DIMMING	RECESSED	19W	1
A2	SAME AS TYPE A1, EXCEPT LED PACKAGE	-	LED, 3500K, 80CRI 3300LM	-	-	31W	1
B1	6"Ø LED DOWNLIGHT WITH WIDE DISTRIBUTION	WILLIAMS LIGHTING: 6DR SERIES	LED, 3500K, 80CRI 1000LM	UNV 0-10V DIMMING	RECESSED	9W	1
B2	SAME AS TYPE B1, EXCEPT LED PACKAGE	-	LED, 3500K, 80CRI 1500LM	-	-	14W	1
C	6"Øx3" TRANSLUCENT WHITE FROSTED CYLINDRICAL LED FIXTURE WITH MEDIUM THROW AND DOWNLIGHT	SPLI LIGHTING: PAVO 6" SERIES	LED, 3500K, 80CRI 3400LM	120V 0-10V DIMMING	CORD SUSPENSION 10'-0" AFF	38W	1
D	6" CYLINDER ARCHITECTURAL LED DOWNLIGHT WITH 70° BEAM ANGLE WITH DMX CONTROLS	GOTHAM LIGHTING: ICO CYL SERIES	LED, 3500K, 80CRI 5500LM	MVOLT 0-10V-10% DIMMING	PENDANT 14'-0" AFF	95W	1,2,7
E1	1'x4' LOW PROFILE LED WRAPAROUND	LITHONIA LIGHTING: BLWP SERIES	LED, 3500K, 80CRI 1500LM	MVOLT 0-10V DIMMING	PENDANT	12W	1
E2	SAME AS E1, EXCEPT LED PACKAGE	-	LED, 3500K, 80CRI 2000LM	MVOLT 0-10V DIMMING	PENDANT	16W	1
E3	SAME AS E1, EXCEPT LED PACKAGE	-	LED, 3500K, 80CRI 3000LM	MVOLT 0-10V DIMMING	PENDANT	25W	1
E4	SAME AS E1, EXCEPT LED PACKAGE	-	LED, 3500K, 80CRI 4000LM	MVOLT 0-10V DIMMING	PENDANT	35W	1
E5	SAME AS E4, EXCEPT MOUNTING TYPE	-	LED, 3500K, 80CRI 4000LM	MVOLT 0-10V DIMMING	SURFACE 8'-0" AFF	35W	1
F1	6"Ø CYLINDER LED DOWNLIGHT WITH WIDE DISTRIBUTION	GOTHAM LIGHTING EVO SERIES	LED, 3500K, 80CRI 3500LM	MVOLT 0-10V DIMMING	PENDANT 10'-0" AFF	25W	1
F2	SAME AS F1, EXCEPT LED PACKAGE	-	LED, 3500K, 80CRI 1500LM	MVOLT 0-10V DIMMING	SURFACE	9W	1
G1	3'x4' SUSPENDED LINEAR LED FIXTURES WITH INTEGRAL DRIVER, AND SLO OUTPUT	EXTANT LIGHTING: HTG-3P SERIES	LED, 3500K, 80CRI 3000LM	120V 0-10V DIMMING	SUSPENDED	25W	1
G2	SAME AS G1, EXCEPT LED PACKAGE	EXTANT LIGHTING: HTG-3P SERIES	LED, 3500K, 80CRI 1000LM	120V 0-10V DIMMING	SUSPENDED	9W	1
G3	3'x3' SUSPENDED LINEAR LED FIXTURES WITH INTEGRAL DRIVER, AND SLO OUTPUT	EXTANT LIGHTING: HTG-3P SERIES	LED, 3500K, 80CRI 3000LM	120V 0-10V DIMMING	SUSPENDED	9W	1
H	8" GLOBE ARCHITECTURAL FIXTURE	CDS LIGHTING: JENNINGS PENDANT SERIES	LED BULB 3500K	120V	SUSPENDED	25W	1,3,4
J	EXTERIOR LED WALL SCONCE WITH VISUAL COMFORT WIDE THROW, EMERGENCY BATTERY BACKUP, AND PHOTOCELL	LITHONIA LIGHTING: WST LED SERIES	LED, 4000K, 80CRI 1500LM	MVOLT	SURFACE	11W	1
K	4' LINEAR, VAPOR TIGHT LED FIXTURE	LITHONIA LIGHTING: XMVL SERIES	LED, 4000K, 80CRI 3500LM	MVOLT	SURFACE	35W	1
L	EXTERIOR GOOSENECK FIXTURE WITH BRUSHED ALUMINIUM FINISH WITH GN05-25 MOUNTING TYPE	LAMPOLITE: AB14-10 SERIES	LED BULB 4000K	120V	SURFACE	13W	1,8,9
	WALL MOUNTED LED EMERGENCY LIGHTING UNIT WITH BATTERY BACKUP IN WHITE	LITHONIA LIGHTING: ELM2L SERIES	LED	120V	SURFACE	4W	1,5,6
	LED EXIST SIGN WITH RED LETTERING AND EMERGENCY BATTERY BACKUP	ISOLITE LIGHTING: TL2 SERIES	LED	120V	SURFACE	4W	1,5

REFERENCE NOTES:

- COLOR AND FINISH PER ARCHITECT
- ORDER WITH APPROPRIATE PENDANT ACCESSORIES.
- EC TO PURCHASE A19 MEDIUM BASE LED BULB, EACH FIXTURE REQUIRES (3) LED BULBS, BULB CKT TO BE 3500K.
- COORDINATE MOUNTING HEIGHT WITH ARCHITECT.
- COORDINATE EXACT MOUNTING REQUIREMENTS AND ORDER APPROPRIATE ACCESSORIES TO ACCOMPLISH DESIGN INTENT.
- ELU SHALL BE BLACK IN COLOR IN ALL LOCATIONS EXCEPT WHEN MOUNTED IN DROPPED CEILING THEN IT SHALL BE WHITE IN COLOR. CONFIRM LOCATIONS PRIOR TO ORDERING.
- ORDER WITH ALL REQUIRED ACCESSORIES TO PROVIDE A FULLY FUNCTIONAL DMX CONTROLS WITH AV INTEGRATION AND WALL SWITCH OVERRIDES. COORDINATE WITH AV CONTRACTOR.
- ORDER WITH AB26-GN05-24 MOUNTING OPTION.
- EC TO PROVIDE A19 MEDIUM BASE LED BULB, BULB CCT TO BE 4000K.

ELECTRICAL EQUIPMENT AND CONTROLS SCHEDULE														MANUAL MOTOR STARTER		LOCATION		GENERAL NOTES														
														X	MANUAL MOTOR STARTER	AU	AT UNIT	A	ALL DEVICES PROVIDED BY DIVISION 26, UNO.													
														HOA	HAND-OFF-AUTO WITH RELAY	IU	INTEGRAL WITH UNIT	B	MOTOR CONTROLLER PROVIDED BY EC.													
														ADJUSTABLE SPEED DRIVE		RE	REMOTE	C	ITEM NUMBER INDICATES EQUIPMENT NUMBER.													
																SAFETY SWITCH		D	PROVIDE OVERLOADS, SIZED PER DIVISION 22/23.													
														X	ASD	ECB	ENCLOSED CB	E	LOCATION OF DUCT MOUNTED SMOKE DETECTORS SHOWN ON MECHANICAL PLANS.													
														B	WITH BYPASS	F	FUSED SWITCH	F	PROVIDE MOTOR CONTROLLER SIZE PER HP RATING.													
														A	WITH REDUNDANT ASD	NF	NON-FUSED SWITCH															
EQUIPMENT						POWER SOURCE, PROTECTION & WIRING						MOTOR CONTROLLER				DISCONNECTING MEANS		INTERCONNECTIONS		REF. NOTES												
ITEM ID	NAME	LOCATION	HP	KW	FLA OR SYSTEM AMPS	PHASE	SYSTEM VOLTAGE	POWER SOURCE	CIRCUIT NUMBER	CIRCUIT BREAKER	WIRING FROM SOURCE TO EQUIPMENT VIA CONTROLLER / DISCONNECT			MANUAL MOTOR STARTER	COMBINATION MAGNETIC STARTER	ADJUSTABLE SPEED DRIVE	PACKAGED CONTROL UNIT	NEMA ENCLOSURE TYPE	MOTOR CONTROLLER LOCATION		SAFETY SWITCH	SWITCH AMPERE RATING	CIRCUIT BREAKER FUSE AMPERE RATING	NEMA ENCLOSURE TYPE	DISCONNECT LOCATION	FIRE ALARM SHUTDOWN	FIRE ALARM SUPPLY SIDE DUCT DETECTORS	FIRE ALARM RETURN SIDE DUCT DETECTORS	MOTORIZED DAMPER CONNECTION	AQUASTAT CONNECTION	THERMOSTAT CONNECTION	
											PHASE	GND	CONDUIT																			
AHU-1-1	AIR HANDLING UNIT	EXTERIOR			195	3	208 V	MDP	8,10,12	225	(3)#300KCMIL	(1)#2	2 1/2"			X		IU					IU	X								
EF-0-1	EXHAUST FAN	B106 MEN			0.5	1	120 V	P-BA	22	15	(2) #12	(1) #12	1/2"					RE	NF	30			1	AU							4	
EF-0-2	EXHAUST FAN	B107 WOMEN			0.5	1	120 V	P-BA	24	15	(2) #12	(1) #12	1/2"					RE	NF	30			1	AU							4	
EF-0-3	EXHAUST FAN	ROOF	1/20	1.6	1	120 V	P-1B	10	15		(2) #12	(1) #12	1/2"					RE								X					4	
EF-1-1	EXHAUST FAN	ROOF	1/6	4.4	1	120 V	P-1B	9	15		(2) #12	(1) #12	1/2"					RE								X					3	
ERV-0-1	ENERGY RECOVERY VENTILATION UNIT	B104A MECHANICAL SPRINKLER			5	3	208 V	P-BB	27,29,31	15	(3) #12	(1) #12	1/2"					RE						IU	X							3
EUH-0-1	ELECTRIC UNIT HEATER	B106 MEN			2	1	208 V	P-BA	23,25	15	(2) #12	(1) #12	1/2"			X		IU														
EUH-0-2	ELECTRIC UNIT HEATER	B107 WOMEN			2	1	208 V	P-BA	26,28	15	(2) #12	(1) #12	1/2"			X		IU														
EUH-0-3	ELECTRIC UNIT HEATER	B107 WOMEN			2.4	1	208 V	P-BA	29,31	15	(2) #12	(1) #12	1/2"			X		IU														
EUH-0-4	ELECTRIC UNIT HEATER	B104A MECHANICAL SPRINKLER	1	8.4	1	120 V	P-BA	30	15		(2) #12	(1) #12	1/2"			X		IU														
EUH-0-5	ELECTRIC UNIT HEATER	B112 ELEC./DATA/IT	1	8.4	1	120 V	P-BA	3	15		(2) #12	(1) #12	1/2"			X		IU														
EUH-0-6	ELECTRIC UNIT HEATER	B117A STORAGE			2	1	208 V	P-BA	10,12	15	(2) #12	(1) #12	1/2"			X		IU														
EUH-1-1	ELECTRIC UNIT HEATER	104A UTILITY	1	8.4	1	120 V	P-1A	17	15		(2) #12	(1) #12	1/2"			X		IU														
EUH-1-2	ELECTRIC UNIT HEATER	104A UTILITY			2	1	208 V	P-1A	39,41	15	(2) #12	(1) #12	1/2"			X		IU														
EUH-1-3	ELECTRIC UNIT HEATER	110A RR			2	1	208 V	P-1A	32,34	15	(2) #12	(1) #12	1/2"			X		IU														
EUH-1-4	ELECTRIC UNIT HEATER	113A RR			2	1	208 V	P-1A	29,31	15	(2) #12	(1) #12	1/2"			X		IU														
EUH-1-5	ELECTRIC UNIT HEATER	106 VEST			9.6	1	208 V	P-1A	35,37	15	(2) #12	(1) #12	1/2"			X		IU														
EUH-1-6	ELECTRIC UNIT HEATER	106 VEST	4	11.1	3	208 V	P-1A	38,40,42	15		(2) #12	(1) #12	1/2"			X		IU														
EUH-1-7	ELECTRIC UNIT HEATER	122 STAIR			2	9.6	1	208 V	P-1A	2,4	15	(2) #12	(1) #12	1/2"			X		IU													
GWH-1	GAS WATER HEATER	B104A MECHANICAL SPRINKLER			5	1	120 V	P-BA	41	15	(2) #12	(1) #12	1/2"			X		IU	NF	30			1	AU								
HRU-0-1	VRF SPLIT SYSTEM AC UNIT	B104A MECHANICAL SPRINKLER			0.2	1	208 V	P-BA	34,36	15	(2) #12	(1) #12	1/2"			X		IU	NF	30			1	AU								
HRU-0-2	VRF SPLIT SYSTEM AC UNIT	B104A MECHANICAL SPRINKLER			0.2	1	208 V	P-BA	38,40	15	(2) #12	(1) #12	1/2"			X		IU	NF	30			1	AU								
IDU-0-1	VRF VERTICAL FLOOR MOUNTED SPLIT UNIT	B118 COPY/PRINT/FAX			1.4	1	208 V	P-BB	1,3	15	(2) #12	(1) #12	1/2"			X		IU	NF	30			1	AU								
IDU-0-2	VRF WALL MOUNTED SPLIT UNIT	B119 OPEN OFFICE			0.3	1	208 V	P-BB	2,4	15	(2) #12	(1) #12	1/2"			X		IU	NF	30			1	AU								1
IDU-0-3	VRF WALL MOUNTED SPLIT UNIT	B120 VOLUNTEERS			0.3	1	208 V	P-BB	9,11	15	(2) #12	(1) #12	1/2"			X		IU	NF	30			1	AU								
IDU-0-4A	VRF WALL MOUNTED SPLIT UNIT	B103 CLASSROOM			0.3	1	208 V	P-BB	5,7	15	(2) #12	(1) #12	1/2"			X		IU	NF	30			1	AU								1
IDU-0-4B	VRF WALL MOUNTED SPLIT UNIT	B103 CLASSROOM			0.3	1	208 V	P-BB	6,8	15	(2) #12	(1) #12	1/2"			X		IU	NF	30			1	AU								1
IDU-0-5	VRF VERTICAL FLOOR MOUNTED SPLIT UNIT	B104 UTILITY ROOM			1.4	1	208 V	P-BB	19,21	15	(2) #12	(1) #12	1/2"			X		IU	NF	30			1	AU								
IDU-0-6	VRF WALL MOUNTED SPLIT UNIT	B110 GREEN ROOM			0.3	1	208 V	P-BB	20,22	20	(2) #12	(1) #12	1/2"			X		IU	NF	30			1	AU								
IDU-1-1	INDOOR AC UNIT	120B CONTROL ROOM			0	1	208 V	P-BB	15,17	15	(2) #12	(1) #12	1/2"			X		IU	NF	30			1	AU								2
ODU-0-1	CONDENSER UNIT	EXTERIOR			22.6	3	208 V	P-BB	14,16,18	35	(3) #6	(1) #10	3/4"			X		IU	F	60	40	4	AU									
ODU-1-1	CONDENSER UNIT	EXTERIOR			8	1	208 V	P-BB	15,17	15	(2) #12	(1) #12	1/2"			X		IU	NF	30			4	AU								2
PP-1	PUMP	B104A MECHANICAL SPRINKLER	1/3		3.6	1	120 V	P-BA	39	15	(2) #12	(1) #12	1/2"			X		IU	NF	30			1	AU								
RTU-1-1	ROOF TOP UNIT	ROOF			50	3	208 V	MDP	13,15,17	60	(3) #4	(1) #10	1 1/4"			X		IU						IU	X							
RTU-1-2	ROOF TOP UNIT	ROOF			55	3	208 V	MDP	14,16,18	80	(3) #3	(1) #8	1 1/4"			X		IU						IU	X							
VAV-1-1	VAV AIR TERMINAL UNIT	108 CORRIDOR			24.3	3	208 V	P-1A	26,28,30	25	(3) #10	(1) #10	3/4"			X		IU														
VAV-1-2	VAV AIR TERMINAL UNIT	108 CORRIDOR			45.1	3	208 V	P-1A	21,23,25	50	(3) #6	(1) #10	1"			X		IU														
VAV-1-3	VAV AIR TERMINAL UNIT	108 CORRIDOR			52	3	208 V	P-1A	20,22,24	60	(3) #4	(1) #10	1 1/4"			X		IU														
REF. NOTES																																
1. PROVIDE 120V POWER AND ASSOCIATE MEANS OF DISCONNECT TO CONDENSATE PUMP.																																
2. OUTSIDE UNIT(ODU-1-1) TO FEED INSIDE UNIT (IDU-1-1).																																
3. INSTALL TIMECLOCK PROVIDED BY MC. COORDINATE WITH MC.																																
4. EXHAUST FAN TO BE INTEGRATE INTO LOCAL LIGHTING CONTROL. PROVIDE ALL ACCESSORIES FOR A COMPLETE SYSTEM. COORDINATE WITH MC.																																

